Milliman
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September 2014

Applegate Valley Rural Fire Protection District #9/2664
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
Applegate Valley Rural Fire Protection District #9/2664

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

Applegate Valley Rural Fire Protection District #9 -- #2664

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Applegate Valley Rural Fire Protection District #9 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 Applegate Valley Rural Fire Protection District #9.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Applegate Valley Rural Fire Protection District #9

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.23%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(1.24%)	(1.24%)	(1.24%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**13.60%**	**6.70%**	**10.81%**
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	**14.13%**	**7.15%**	**11.26%**

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

1 *Includes Multnomah Fire District #10 rate.*

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	12.99%	12.99%
Minimum July 1, 2017 Rate	9.99%	6.99%
Maximum July 1, 2017 Rate	15.99%	18.99%

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	$1,108,730	$1,158,031	$49,301	96%	$431,829	11%
12/31/2009	1,275,751	1,295,350	19,599	98%	421,258	5%
12/31/2010	1,418,875	1,380,228	(38,647)	103%	468,252	(8%)
12/31/2011	1,483,793	1,483,736	(57)	100%	461,525	0%
12/31/2012	1,735,182	1,708,530	(26,652)	102%	486,254	(5%)
12/31/2013	2,030,453	1,929,051	(101,402)	105%	528,604	(19%)

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.

Applegate Valley Rural Fire Protection District #9

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($101,402)	($26,652)
Allocated pooled OPSRP UAL	37,376	34,273
Side account	0	0
Net unfunded pension actuarial accrued liability	(64,026)	7,621
Combined valuation payroll	528,604	486,254
Net pension UAL as a percentage of payroll	(12%)	2%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,316	$10,202

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	$63,850	$60,083
Tier 1/Tier 2 valuation payroll	448,799	422,168
Tier 1/Tier 2 pension normal cost rate	14.23%	14.23%
Tier 1/ Tier 2 Actuarial accrued liability	$1,929,051	$1,708,530
Actuarial asset value	2,030,453	1,735,182
Tier 1/Tier 2 Unfunded actuarial accrued liability	(101,402)	(26,652)
Tier 1/ Tier 2 Funded status	105%	102%
Combined valuation payroll	$528,604	$486,254
Tier 1/Tier 2 UAL as a percentage of payroll	(19%)	(5%)
Tier 1/Tier 2 UAL rate	(1.24%)	(0.27%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	6	6
Tier 1/Tier 2 dormant members	3	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	528,604	486,254
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]	$308,783	$278,545
2. Employer reserves	1,517,279	1,262,286
3. Benefits in force reserve	204,391	194,352
4. Total market value of assets ***(1. + 2. + 3.)***	**$2,030,453**	**$1,735,182**

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	$1,735,182
2. Regular employer contributions	50,753
3. Benefit payments and expense	(31,640)
4. Adjustments[2]	15,614
5. Interest credited	260,544
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$2,030,453**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	$17,155	$15,973
Tier 1 General Service	0	0
Tier 2 Police & Fire	41,248	38,807
Tier 2 General Service	5,447	5,303
Total	**$63,850**	**$60,083**

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	$63,850	$63,850	$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	$580,709	$480,770
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	723,339	633,486
▪ Tier 2 General Service	87,946	78,521
▪ **Total Active Members**	**$1,391,994**	**$1,192,777**
Dormant Members	207,587	188,244
Retired Members and Beneficiaries	329,470	327,509
Total Actuarial Accrued Liability	**$1,929,051**	**$1,708,530**

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	$1,929,051	$1,929,051	$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	$1,929,051	$1,708,530
2. Actuarial value of assets	2,030,453	1,735,182
3. Unfunded accrued liability *(1. – 2.)*	(101,402)	(26,652)
4. Funded percentage *(2. ÷ 1.)*	105%	102%
5. Combined valuation payroll	$528,604	$486,254
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(19%)	(5%)

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	($101,402)	($7,339)
Total				**($101,402)**	**($7,339)**

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	$1,708,530
b. Normal cost at December 31, 2012	60,083
c. Benefit payments during 2013	(31,390)
d. Interest at 7.75% to December 31, 2013	135,851
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,873,074
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.)*	1,873,074
2. Actuarial accrued liability at December 31, 2013	1,929,051
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(55,977)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,735,182
b. Contributions for 2013[1]	50,753
c. Benefit payments and expenses during 2013	(31,640)
d. Interest at 7.75% to December 31, 2013	135,217
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,889,512
5. Actuarial value of assets at December 31, 2013	2,030,453
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	140,941
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$84,964**

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	**($26,652)**
2. Expected increase	10,214
3. Liability (gain)/loss	55,977
4. Asset (gain)/loss	(140,941)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($101,402)**

[1] *Includes rate relief from side accounts.*

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

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

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	$17,155	$113,705	15.09%	$15,973	$104,981	15.22%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	41,248	286,898	14.38%	38,807	269,927	14.38%
Tier 2 General Service	5,447	48,196	11.30%	5,303	47,260	11.22%
Total	**$63,850**	**$448,799**	**14.23%**	**$60,083**	**$422,168**	**14.23%**

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	($101,402)	($26,652)
2. Next year's Tier 1/Tier 2 UAL payment	(7,339)	(1,929)
3. Combined valuation payroll	528,604	486,254
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(1.39%)	(0.40%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	**Advisory July 1, 2015 Rates calculated as of December 31, 2012**
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.23%	14.23%
b. Tier 1/Tier 2 UAL rate	(1.39%)	(0.40%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	12.99%	13.96%

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	10.99%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.99%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.20%
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%)*	7.99%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.99%
7. July 1, 2015 total pension rate, before adjustment	12.99%
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	(1.39%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(1.39%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.99%
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	14.23%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.23%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	12.99%

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	14.23%	14.23%
b. Tier 1/Tier 2 UAL rate	(1.39%)	(0.40%)
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%)*	12.99%	13.96%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$113,705	$113,705
Tier 2	48,196	286,898	335,094
Tier 1/Tier 2 valuation payroll	48,196	400,603	448,799
OPSRP valuation payroll	0	79,805	79,805
Combined valuation payroll	**$48,196**	**$480,408**	**$528,604**

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	4	2	7	1	4	1	6
Total	1	5	2	8	1	5	1	7
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	2	3	N/A	5	2	2	N/A	4
Total	2	3	N/A	5	2	2	N/A	4
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	1	2	0	3	1	1	0	2
Total	1	2	0	3	1	1	0	2
Retired Members and Beneficiaries								
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
Grand Total Number of Members	**5**	**10**	**2**	**17**	**5**	**8**	**1**	**14**

[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										
40-44			1							1
45-49			1							1
50-54				1						1
55-59			1	1						2
60-64										
65-69										
70-74										
75+										
Total	0	1	3	2	0	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		
40-44	1	108
45-49		
50-54	1	379
55-59		
60-64		
65-69	1	1,286
70-74		
75+		
Total	3	591

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69	1	2,102
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	2,102

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

Banks Fire District #13/2702
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
Banks Fire District #13/2702

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

Banks Fire District #13 -- #2702

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Banks Fire District #13 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 Banks Fire District #13.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Banks Fire District #13

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.13%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	4.01%	4.01%	4.01%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**17.75%**	**11.95%**	**16.06%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**18.28%**	**12.40%**	**16.51%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 79%.

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	17.14%	17.14%
Minimum July 1, 2017 Rate	13.71%	10.28%
Maximum July 1, 2017 Rate	20.57%	24.00%

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	$339,877	$457,508	$117,631	74%	$146,158	80%
12/31/2009	399,672	467,019	67,346	86%	154,254	44%
12/31/2010	446,830	511,823	64,993	87%	159,008	41%
12/31/2011	458,745	561,533	102,788	82%	169,149	61%
12/31/2012	539,106	634,391	95,285	85%	153,539	62%
12/31/2013	568,184	715,252	147,068	79%	77,362	190%

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.

Banks Fire District #13

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$147,068	$95,285
Allocated pooled OPSRP UAL	5,470	10,822
Side account	0	0
Net unfunded pension actuarial accrued liability	152,538	106,107
Combined valuation payroll	77,362	153,539
Net pension UAL as a percentage of payroll	197%	69%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,071	$3,221

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	$9,772	$20,182
Tier 1/Tier 2 valuation payroll	74,450	153,539
Tier 1/Tier 2 pension normal cost rate	13.13%	13.14%
Tier 1/ Tier 2 Actuarial accrued liability	$715,252	$634,391
Actuarial asset value	568,184	539,106
Tier 1/Tier 2 Unfunded actuarial accrued liability	147,068	95,285
Tier 1/ Tier 2 Funded status	79%	85%
Combined valuation payroll	$77,362	$153,539
Tier 1/Tier 2 UAL as a percentage of payroll	190%	62%
Tier 1/Tier 2 UAL rate	4.01%	4.00%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	2
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	4	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	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	77,362	153,539
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]	$23,720	$41,934
2. Employer reserves	220,931	346,808
3. Benefits in force reserve	323,533	150,364
4. Total market value of assets ***(1. + 2. + 3.)***	**$568,184**	**$539,106**

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	$539,106
2.	Regular employer contributions	21,379
3.	Benefit payments and expense	(50,084)
4.	Adjustments [2]	(46,633)
5.	Interest credited	104,416
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$568,184**

[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	$10,747
Tier 1 General Service	0	0
Tier 2 Police & Fire	9,772	9,435
Tier 2 General Service	0	0
Total	**$9,772**	**$20,182**

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	$9,772	$9,772	$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	$208,791
▪ Tier 1 General Service	14,000	12,789
▪ Tier 2 Police & Fire	149,705	131,543
▪ Tier 2 General Service	30,024	27,884
▪ **Total Active Members**	**$193,729**	**$381,007**
Dormant Members	0	0
Retired Members and Beneficiaries	521,523	253,384
Total Actuarial Accrued Liability	**$715,252**	**$634,391**

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	$715,252	$715,252	$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	$715,252	$634,391
2. Actuarial value of assets	568,184	539,106
3. Unfunded accrued liability *(1. – 2.)*	147,068	95,285
4. Funded percentage *(2. ÷ 1.)*	79%	85%
5. Combined valuation payroll	$77,362	$153,539
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	190%	62%

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	$147,068	$10,645
Total				**$147,068**	**$10,645**

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	$634,391
b. Normal cost at December 31, 2012	20,182
c. Benefit payments during 2013	(49,687)
d. Interest at 7.75% to December 31, 2013	48,804
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	653,690
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.)*	653,690
2. Actuarial accrued liability at December 31, 2013	715,252
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(61,562)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	539,106
b. Contributions for 2013[1]	21,379
c. Benefit payments and expenses during 2013	(50,084)
d. Interest at 7.75% to December 31, 2013	40,668
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	551,069
5. Actuarial value of assets at December 31, 2013	568,184
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	17,115
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($44,447)**

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	**$95,285**
2. Expected increase	7,336
3. Liability (gain)/loss	61,562
4. Asset (gain)/loss	(17,115)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$147,068**

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%	$10,747	$80,520	13.35%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	9,772	74,450	13.13%	9,435	73,019	12.92%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$9,772**	**$74,450**	**13.13%**	**$20,182**	**$153,539**	**13.14%**

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	$147,068	$95,285
2. Next year's Tier 1/Tier 2 UAL payment	10,645	6,897
3. Combined valuation payroll	77,362	153,539
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	13.76%	4.49%

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	13.13%	13.14%
b. Tier 1/Tier 2 UAL rate	13.76%	4.49%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	27.04%	17.76%

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	14.14%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	14.14%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.83%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	79%
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%)*	11.14%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	17.14%
7. July 1, 2015 total pension rate, before adjustment	27.04%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(9.90%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	13.76%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	3.86%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	17.14%
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	13.13%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.13%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	17.14%

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	13.13%	13.14%
b. Tier 1/Tier 2 UAL rate	3.86%	3.87%
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%)*	17.14%	17.14%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	0	74,450	74,450
Tier 1/Tier 2 valuation payroll	0	74,450	74,450
OPSRP valuation payroll	2,912	0	2,912
Combined valuation payroll	**$2,912**	**$74,450**	**$77,362**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	1	0	1	1	1	0	2
Total	0	1	0	1	1	1	0	2
Active Members with previous service segments with the employer								
General Service	1	1	N/A	2	0	1	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	1	1	N/A	2	0	1	N/A	1
Dormant Members								
General Service	0	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	3	0	0	3	2	0	0	2
Total	4	0	0	4	3	0	0	3
Grand Total Number of Members	**5**	**2**	**0**	**7**	**4**	**2**	**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				1						**1**
40-44										
45-49										
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	1	1,558
60-64		
65-69	1	504
70-74	2	708
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	4	869

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

Bend Parks & Recreation/2596
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
Bend Parks & Recreation/2596

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
Bend Parks & Recreation/2596

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

Bend Parks & Recreation -- #2596

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Bend Parks & Recreation 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 Bend Parks & Recreation.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Bend Parks & Recreation

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.18%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.87%)	(0.87%)	(0.87%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**11.92%**	**7.07%**	**11.18%**
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	**12.45%**	**7.52%**	**11.63%**

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 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	11.31%	11.31%
Minimum July 1, 2017 Rate	8.31%	5.31%
Maximum July 1, 2017 Rate	14.31%	17.31%

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	$9,216,475	$10,663,648	$1,447,173	86%	$5,256,904	28%
12/31/2009	10,568,000	11,449,834	881,834	92%	5,573,280	16%
12/31/2010	11,873,968	12,796,796	922,828	93%	5,742,374	16%
12/31/2011	11,574,356	13,624,264	2,049,908	85%	5,084,185	40%
12/31/2012	12,908,743	14,482,667	1,573,924	89%	5,137,769	31%
12/31/2013	14,514,102	15,625,224	1,111,122	93%	5,832,411	19%

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.

Bend Parks & Recreation

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$1,111,122	$1,573,924
Allocated pooled OPSRP UAL	412,387	362,124
Side account	0	0
Net unfunded pension actuarial accrued liability	1,523,509	1,936,048
Combined valuation payroll	5,832,411	5,137,769
Net pension UAL as a percentage of payroll	26%	38%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$80,727	$107,793

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	$358,256	$351,090
Tier 1/Tier 2 valuation payroll	2,941,435	2,769,815
Tier 1/Tier 2 pension normal cost rate	12.18%	12.68%
Tier 1/ Tier 2 Actuarial accrued liability	$15,625,224	$14,482,667
Actuarial asset value	14,514,102	12,908,743
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,111,122	1,573,924
Tier 1/ Tier 2 Funded status	93%	89%
Combined valuation payroll	$5,832,411	$5,137,769
Tier 1/Tier 2 UAL as a percentage of payroll	19%	31%
Tier 1/Tier 2 UAL rate	(0.87%)	(1.37%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	53	55
Tier 1/Tier 2 dormant members	68	71
Tier 1/Tier 2 retirees and beneficiaries	72	61

[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	5,832,411	5,137,769
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]	$2,800,151	$2,728,522
2. Employer reserves	7,936,484	6,840,709
3. Benefits in force reserve	3,777,467	3,339,513
4. Total market value of assets *(1. + 2. + 3.)*	**$14,514,102**	**$12,908,743**

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	$12,908,743
2.	Regular employer contributions	247,966
3.	Benefit payments and expense	(584,768)
4.	Adjustments [2]	101,207
5.	Interest credited	1,840,953
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$14,514,102**

[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	216,562	217,527
Tier 2 Police & Fire	0	0
Tier 2 General Service	141,694	133,563
Total	**$358,256**	**$351,090**

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	$358,256	$358,256	$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	5,112,884	4,903,811
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	2,628,555	2,363,650
▪ **Total Active Members**	**$7,741,439**	**$7,267,461**
Dormant Members	1,794,640	1,587,665
Retired Members and Beneficiaries	6,089,145	5,627,541
Total Actuarial Accrued Liability	**$15,625,224**	**$14,482,667**

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	$15,625,224	$15,625,224	$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	$15,625,224	$14,482,667
2. Actuarial value of assets	14,514,102	12,908,743
3. Unfunded accrued liability *(1. – 2.)*	1,111,122	1,573,924
4. Funded percentage *(2. ÷ 1.)*	93%	89%
5. Combined valuation payroll	$5,832,411	$5,137,769
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	19%	31%

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	$1,111,122	$80,423
Total				**$1,111,122**	**$80,423**

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	$14,482,667
b. Normal cost at December 31, 2012	351,090
c. Benefit payments during 2013	(580,130)
d. Interest at 7.75% to December 31, 2013	1,127,136
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	15,380,763
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.)*	15,380,763
2. Actuarial accrued liability at December 31, 2013	15,625,224
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(244,461)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	12,908,743
b. Contributions for 2013[1]	247,966
c. Benefit payments and expenses during 2013	(584,768)
d. Interest at 7.75% to December 31, 2013	987,377
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	13,559,318
5. Actuarial value of assets at December 31, 2013	14,514,102
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	954,784
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$710,323**

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	**$1,573,924**
2. Expected increase	247,521
3. Liability (gain)/loss	244,461
4. Asset (gain)/loss	(954,784)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$1,111,122**

[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	216,562	1,604,666	13.50%	217,527	1,520,925	14.30%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	141,694	1,336,769	10.60%	133,563	1,248,890	10.69%
Total	**$358,256**	**$2,941,435**	**12.18%**	**$351,090**	**$2,769,815**	**12.68%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$1,111,122	$1,573,924
2. Next year's Tier 1/Tier 2 UAL payment	80,423	113,920
3. Combined valuation payroll	5,832,411	5,137,769
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	1.38%	2.22%

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	12.18%	12.68%
b. Tier 1/Tier 2 UAL rate	1.38%	2.22%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.71%	15.03%

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	8.31%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	8.31%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.66%
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%)*	5.31%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.31%
7. July 1, 2015 total pension rate, before adjustment	13.71%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.40%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	1.38%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(1.02%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.31%
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	12.18%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.18%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	11.31%

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	12.18%	12.68%
b. Tier 1/Tier 2 UAL rate	(1.02%)	(1.50%)
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%)*	11.31%	11.31%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$1,604,666	$0	$1,604,666
Tier 2	1,336,769	0	1,336,769
Tier 1/Tier 2 valuation payroll	2,941,435	0	2,941,435
OPSRP valuation payroll	2,890,976	0	2,890,976
Combined valuation payroll	**$5,832,411**	**$0**	**$5,832,411**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	27	26	100	153	28	27	95	150
Police & Fire	0	0	0	0	0	0	0	0
Total	27	26	100	153	28	27	95	150
Active Members with previous service segments with the employer								
General Service	26	53	N/A	79	28	49	N/A	77
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	26	53	N/A	79	28	49	N/A	77
Dormant Members								
General Service	28	40	23	91	31	40	19	90
Police & Fire	0	0	0	0	0	0	0	0
Total	28	40	23	91	31	40	19	90
Retired Members and Beneficiaries								
General Service	65	7	1	73	55	6	1	62
Police & Fire	0	0	0	0	0	0	0	0
Total	65	7	1	73	55	6	1	62
Grand Total Number of Members	**146**	**126**	**124**	**396**	**142**	**122**	**115**	**379**

[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			2							**2**
35-39			2							**2**
40-44		1	4	3	1					**9**
45-49		1	4	2	2					**9**
50-54			2	4	4	1				**11**
55-59			7	1		2				**10**
60-64			2	2	4	1				**9**
65-69				1						**1**
70-74										
75+										
Total	**0**	**2**	**23**	**13**	**11**	**4**	**0**	**0**	**0**	**53**

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	3	284
30-34	3	166
35-39	8	328
40-44	10	362
45-49	8	675
50-54	8	51
55-59	14	262
60-64	9	480
65-69	5	217
70-74		
75+		
Total	68	331

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	3	17
55-59	11	801
60-64	24	741
65-69	19	305
70-74	13	665
75-79	1	571
80-84		
85-89	1	635
90-94		
95-99		
100+		
Total	72	587

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

Black Butte Ranch Rural Fire Protection District/2648
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
Black Butte Ranch Rural Fire Protection District/2648

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

Black Butte Ranch Rural Fire Protection District -- #2648

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Black Butte Ranch 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 Black Butte Ranch 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 Black Butte Ranch Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	16.69%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(4.98%)	(4.98%)	(4.98%)
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%**	**2.96%**	**7.07%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**12.85%**	**3.41%**	**7.52%**

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

1 *Includes Multnomah Fire District #10 rate.*

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 103%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	11.71%	11.71%
Minimum July 1, 2017 Rate	8.71%	5.71%
Maximum July 1, 2017 Rate	14.71%	17.71%

Executive Summary

Accounting Information

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

Pension

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

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	$2,771,033	$2,798,195	$27,162	99%	$493,884	6%
12/31/2009	3,179,320	3,130,088	(49,232)	102%	518,846	(9%)
12/31/2010	3,440,032	3,355,979	(84,053)	103%	594,334	(14%)
12/31/2011	3,324,045	3,404,058	80,013	98%	618,314	13%
12/31/2012	3,629,332	3,581,851	(47,481)	101%	702,997	(7%)
12/31/2013	4,050,159	3,942,757	(107,402)	103%	750,341	(14%)

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.

Black Butte Ranch Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($107,402)	($47,481)
Allocated pooled OPSRP UAL	53,054	49,549
Side account	0	0
Net unfunded pension actuarial accrued liability	(54,348)	2,068
Combined valuation payroll	750,341	702,997
Net pension UAL as a percentage of payroll	(7%)	0%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,386	$14,749

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	$60,193	$55,887
Tier 1/Tier 2 valuation payroll	360,669	332,788
Tier 1/Tier 2 pension normal cost rate	16.69%	16.79%
Tier 1/ Tier 2 Actuarial accrued liability	$3,942,757	$3,581,851
Actuarial asset value	4,050,159	3,629,332
Tier 1/Tier 2 Unfunded actuarial accrued liability	(107,402)	(47,481)
Tier 1/ Tier 2 Funded status	103%	101%
Combined valuation payroll	$750,341	$702,997
Tier 1/Tier 2 UAL as a percentage of payroll	(14%)	(7%)
Tier 1/Tier 2 UAL rate	(4.98%)	(5.08%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	3	3
Tier 1/Tier 2 dormant members	3	3
Tier 1/Tier 2 retirees and beneficiaries	11	10

[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	750,341	702,997
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]	$528,586	$479,799
2. Employer reserves	2,426,782	2,117,273
3. Benefits in force reserve	1,094,790	1,032,260
4. Total market value of assets ***(1. + 2. + 3.)***	**$4,050,159**	**$3,629,332**

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

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	$3,629,332
2. Regular employer contributions	(3,813)
3. Benefit payments and expense	(169,478)
4. Adjustments[2]	72,946
5. Interest credited	521,172
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$4,050,159**

[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	$40,473	$36,945
Tier 1 General Service	0	0
Tier 2 Police & Fire	19,720	18,942
Tier 2 General Service	0	0
Total	**$60,193**	**$55,887**

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	$60,193	$60,193	$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	$1,572,150	$1,313,400
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	345,007	294,434
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$1,917,157**	**$1,607,834**
Dormant Members	260,837	234,517
Retired Members and Beneficiaries	1,764,763	1,739,500
Total Actuarial Accrued Liability	**$3,942,757**	**$3,581,851**

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	$3,942,757	$3,942,757	$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	$3,942,757	$3,581,851
2. Actuarial value of assets	4,050,159	3,629,332
3. Unfunded accrued liability *(1. – 2.)*	(107,402)	(47,481)
4. Funded percentage *(2. ÷ 1.)*	103%	101%
5. Combined valuation payroll	$750,341	$702,997
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(14%)	(7%)

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	($107,402)	($7,774)
Total				**($107,402)**	**($7,774)**

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	$3,581,851
b. Normal cost at December 31, 2012	55,887
c. Benefit payments during 2013	(168,134)
d. Interest at 7.75% to December 31, 2013	275,410
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	3,745,014
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.)*	3,745,014
2. Actuarial accrued liability at December 31, 2013	3,942,757
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(197,743)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	3,629,332
b. Contributions for 2013[1]	(3,813)
c. Benefit payments and expenses during 2013	(169,478)
d. Interest at 7.75% to December 31, 2013	274,558
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	3,730,599
5. Actuarial value of assets at December 31, 2013	4,050,159
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	319,560
7. Total actuarial gain/(loss) *(3. + 6.)*	**$121,817**

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	**($47,481)**
2. Expected increase	61,896
3. Liability (gain)/loss	197,743
4. Asset (gain)/loss	(319,560)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($107,402)**

[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	$40,473	$247,459	16.36%	$36,945	$223,876	16.50%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	19,720	113,210	17.42%	18,942	108,912	17.39%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$60,193**	**$360,669**	**16.69%**	**$55,887**	**$332,788**	**16.79%**

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	($107,402)	($47,481)
2. Next year's Tier 1/Tier 2 UAL payment	(7,774)	(3,437)
3. Combined valuation payroll	750,341	702,997
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(1.04%)	(0.49%)

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	16.69%	16.79%
b. Tier 1/Tier 2 UAL rate	(1.04%)	(0.49%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.80%	16.43%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

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

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

1. Current net Tier 1/Tier 2 pension contribution rate	8.71%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	8.71%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.74%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	103%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	5.71%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.71%
7. July 1, 2015 total pension rate, before adjustment	15.80%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(4.09%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(1.04%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(5.13%)
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	16.69%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	16.69%
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	16.69%	16.79%
b. Tier 1/Tier 2 UAL rate	(5.13%)	(5.21%)
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%)*	11.71%	11.71%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$247,459	$247,459
Tier 2	0	113,210	113,210
Tier 1/Tier 2 valuation payroll	0	360,669	360,669
OPSRP valuation payroll	49,189	340,483	389,672
Combined valuation payroll	**$49,189**	**$701,152**	**$750,341**

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	2	1	4	7	2	1	4	7
Total	2	1	5	8	2	1	5	8
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	4	2	N/A	6	4	2	N/A	6
Total	4	2	N/A	6	4	2	N/A	6
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	2	1	0	3	2	1	0	3
Total	2	1	0	3	2	1	0	3
Retired Members and Beneficiaries								
General Service	1	0	0	1	1	0	0	1
Police & Fire	10	0	0	10	9	0	0	9
Total	11	0	0	11	10	0	0	10
Grand Total Number of Members	**19**	**4**	**5**	**28**	**18**	**4**	**5**	**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

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				1						**1**
45-49			1		1					**2**
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	**0**	**0**	**1**	**1**	**1**	**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	2	1,436
45-49		
50-54	1	657
55-59		
60-64		
65-69		
70-74		
75+		
Total	3	1,176

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	2	1,221
60-64	2	1,621
65-69	1	493
70-74	4	1,018
75-79	2	796
80-84		
85-89		
90-94		
95-99		
100+		
Total	11	1,077

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

Boardman Rural Fire Protection District/2833
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
Boardman Rural Fire Protection District/2833

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
Boardman Rural Fire Protection District/2833

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

Boardman Rural Fire Protection District -- #2833

September 2014

CONTENTS

Executive Summary

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

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.27%	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	**17.72%**	**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	**18.25%**	**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 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	17.11%	17.11%
Minimum July 1, 2017 Rate	13.69%	10.27%
Maximum July 1, 2017 Rate	20.53%	23.95%

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	$150,740	$161,496	$10,756	93%	$185,182	6%
12/31/2009	188,954	189,184	230	100%	194,424	0%
12/31/2010	219,141	218,028	(1,113)	101%	342,071	0%
12/31/2011	232,340	251,708	19,368	92%	318,829	6%
12/31/2012	279,659	285,777	6,118	98%	336,480	2%
12/31/2013	333,886	317,127	(16,759)	105%	386,969	(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.

Boardman Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($16,759)	$6,118
Allocated pooled OPSRP UAL	27,361	23,716
Side account	0	0
Net unfunded pension actuarial accrued liability	10,602	29,834
Combined valuation payroll	386,969	336,480
Net pension UAL as a percentage of payroll	3%	9%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,356	$7,059

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	$14,106	$13,407
Tier 1/Tier 2 valuation payroll	81,665	79,344
Tier 1/Tier 2 pension normal cost rate	17.27%	16.90%
Tier 1/ Tier 2 Actuarial accrued liability	$317,127	$285,777
Actuarial asset value	333,886	279,659
Tier 1/Tier 2 Unfunded actuarial accrued liability	(16,759)	6,118
Tier 1/ Tier 2 Funded status	105%	98%
Combined valuation payroll	$386,969	$336,480
Tier 1/Tier 2 UAL as a percentage of payroll	(4%)	2%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(0.16%)	0.26%
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	386,969	336,480
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]	$43,213	$37,165
2. Employer reserves	290,673	242,494
3. Benefits in force reserve	0	0
4. Total market value of assets *(1. + 2. + 3.)*	**$333,886**	**$279,659**

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	$279,659
2.	Regular employer contributions	9,286
3.	Benefit payments and expense	0
4.	Adjustments[2]	(129)
5.	Interest credited	45,070
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$333,886**

[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	14,106	13,407
Tier 2 General Service	0	0
Total	**$14,106**	**$13,407**

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	$14,106	$14,106	$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	317,127	285,777
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$317,127**	**$285,777**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$317,127**	**$285,777**

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	$317,127	$317,127	$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	$317,127	$285,777
2. Actuarial value of assets	333,886	279,659
3. Unfunded accrued liability *(1. – 2.)*	(16,759)	6,118
4. Funded percentage *(2. ÷ 1.)*	105%	98%
5. Combined valuation payroll	$386,969	$336,480
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(4%)	2%

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	($16,759)	($1,213)
Total				**($16,759)**	**($1,213)**

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	$285,777
b. Normal cost at December 31, 2012	13,407
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	23,187
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	322,371
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.)*	322,371
2. Actuarial accrued liability at December 31, 2013	317,127
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	5,244
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	279,659
b. Contributions for 2013[1]	9,286
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	22,033
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	310,978
5. Actuarial value of assets at December 31, 2013	333,886
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	22,908
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$28,152**

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	**$6,118**
2. Expected increase	5,275
3. Liability (gain)/loss	(5,244)
4. Asset (gain)/loss	(22,908)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($16,759)**

[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	14,106	81,665	17.27%	13,407	79,344	16.90%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$14,106**	**$81,665**	**17.27%**	**$13,407**	**$79,344**	**16.90%**

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	($16,759)	$6,118
2. Next year's Tier 1/Tier 2 UAL payment	(1,213)	443
3. Combined valuation payroll	386,969	336,480
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.31%)	0.13%

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	17.27%	16.90%
b. Tier 1/Tier 2 UAL rate	(0.31%)	0.13%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	17.11%	17.16%

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	15.43%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	15.43%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.09%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.09%
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.)*	3.09%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	12.34%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	18.52%
7. July 1, 2015 total pension rate, before adjustment	17.11%
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	(0.31%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.31%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	17.11%
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	17.27%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.27%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	17.11%

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	17.27%	16.90%
b. Tier 1/Tier 2 UAL rate	(0.31%)	0.13%
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%)*	17.11%	17.16%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	0	81,665	81,665
Tier 1/Tier 2 valuation payroll	0	81,665	81,665
OPSRP valuation payroll	35,640	269,664	305,304
Combined valuation payroll	**$35,640**	**$351,329**	**$386,969**

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	1	6	7	0	1	5	6
Total	0	1	7	8	0	1	6	7
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	1	N/A	1	0	0	N/A	0
Total	0	1	N/A	1	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Grand Total Number of Members	**0**	**2**	**7**	**9**	**0**	**1**	**6**	**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										
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		
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

Brownsville Rural Fire Protection District/2779
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
Brownsville Rural Fire Protection District/2779

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

Brownsville Rural Fire Protection District -- #2779

September 2014

CONTENTS

Executive Summary

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

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	16.34%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(4.74%)	(4.74%)	(4.74%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.21%**	**3.20%**	**7.31%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**12.74%**	**3.65%**	**7.76%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

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

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	11.60%	11.60%
Minimum July 1, 2017 Rate	8.60%	5.60%
Maximum July 1, 2017 Rate	14.60%	17.60%

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	$223,089	$250,636	$27,547	89%	$66,164	42%
12/31/2009	277,778	281,218	3,440	99%	69,979	5%
12/31/2010	316,335	333,084	16,749	95%	75,225	22%
12/31/2011	334,703	375,388	40,685	89%	84,296	48%
12/31/2012	394,320	394,366	46	100%	82,896	0%
12/31/2013	463,170	409,045	(54,125)	113%	80,187	(67%)

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.

Brownsville Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($54,125)	$46
Allocated pooled OPSRP UAL	5,670	5,843
Side account	0	0
Net unfunded pension actuarial accrued liability	(48,455)	5,889
Combined valuation payroll	80,187	82,896
Net pension UAL as a percentage of payroll	(60%)	7%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,110	$1,739

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

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
Normal cost	$13,102	$13,331
Tier 1/Tier 2 valuation payroll	80,187	82,896
Tier 1/Tier 2 pension normal cost rate	16.34%	16.08%
Tier 1/ Tier 2 Actuarial accrued liability	$409,045	$394,366
Actuarial asset value	463,170	394,320
Tier 1/Tier 2 Unfunded actuarial accrued liability	(54,125)	46
Tier 1/ Tier 2 Funded status	113%	100%
Combined valuation payroll	$80,187	$82,896
Tier 1/Tier 2 UAL as a percentage of payroll	(68%)	0%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(4.74%)	(0.04%)
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	80,187	82,896
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]	$93,149	$84,082
2. Employer reserves	370,021	310,238
3. Benefits in force reserve	0	0
4. Total market value of assets *(1. + 2. + 3.)*	**$463,170**	**$394,320**

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

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	$394,320
2. Regular employer contributions	9,935
3. Benefit payments and expense	0
4. Adjustments[2]	529
5. Interest credited	58,387
6. Total transferred from side accounts	0
7. Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)*	**$463,170**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	$0	$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	13,102	13,331
Tier 2 General Service	0	0
Total	**$13,102**	**$13,331**

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

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

	Before Changes	After Changes	Net Change
Normal Cost	$13,102	$13,102	$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	$227,639	$224,929
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	181,406	169,437
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$409,045**	**$394,366**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$409,045**	**$394,366**

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	$409,045	$409,045	$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	$409,045	$394,366
2. Actuarial value of assets	463,170	394,320
3. Unfunded accrued liability *(1. – 2.)*	(54,125)	46
4. Funded percentage *(2. ÷ 1.)*	113%	100%
5. Combined valuation payroll	$80,187	$82,896
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(68%)	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	($54,125)	($3,918)
Total				**($54,125)**	**($3,918)**

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	$394,366
b. Normal cost at December 31, 2012	13,331
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	31,597
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	439,294
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.)*	439,294
2. Actuarial accrued liability at December 31, 2013	409,045
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	30,249
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	394,320
b. Contributions for 2013[1]	9,935
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	30,945
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	435,199
5. Actuarial value of assets at December 31, 2013	463,170
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	27,971
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$58,220**

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	**$46**
2. Expected increase	4,049
3. Liability (gain)/loss	(30,249)
4. Asset (gain)/loss	(27,971)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($54,125)**

[1] *Includes rate relief from side accounts.*

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

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

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	$0	$0	0.00%	$0	$0	0.00%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	13,102	80,187	16.34%	13,331	82,896	16.08%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$13,102**	**$80,187**	**16.34%**	**$13,331**	**$82,896**	**16.08%**

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	($54,125)	$46
2. Next year's Tier 1/Tier 2 UAL payment	(3,918)	3
3. Combined valuation payroll	80,187	82,896
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(4.89%)	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	16.34%	16.08%
b. Tier 1/Tier 2 UAL rate	(4.89%)	0.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	11.60%	16.21%

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	13.04%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.04%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.61%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	113%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	10.04%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	16.04%
7. July 1, 2015 total pension rate, before adjustment	11.60%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(4.89%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(4.89%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.60%
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	16.34%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	16.34%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	11.60%

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	16.34%	16.08%
b. Tier 1/Tier 2 UAL rate	(4.89%)	(0.17%)
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%)*	11.60%	16.04%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	0	80,187	80,187
Tier 1/Tier 2 valuation payroll	0	80,187	80,187
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$0**	**$80,187**	**$80,187**

Employer Member Census

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

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

Data

Demographic Information (continued)

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

Age	Years of Service									
	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		
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

Central Oregon Intergovernmental Council/2569
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
Central Oregon Intergovernmental Council/2569

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

Central Oregon Intergovernmental Council -- #2569

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Central Oregon Intergovernmental Council 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 Central Oregon Intergovernmental Council.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Central Oregon Intergovernmental Council

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.62%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.08%	0.08%	0.08%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**13.31%**	**8.02%**	**12.13%**
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	**13.84%**	**8.47%**	**12.58%**

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

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

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	12.70%	12.70%
Minimum July 1, 2017 Rate	9.70%	6.70%
Maximum July 1, 2017 Rate	15.70%	18.70%

Executive Summary

Accounting Information

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

Pension

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

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	$7,252,664	$8,694,695	$1,442,031	83%	$3,047,833	47%
12/31/2009	8,552,656	9,391,954	839,298	91%	3,654,124	23%
12/31/2010	9,331,624	10,220,183	888,559	91%	4,376,107	20%
12/31/2011	8,900,492	10,248,303	1,347,811	87%	4,384,310	31%
12/31/2012	10,203,760	10,991,538	787,778	93%	4,776,592	16%
12/31/2013	11,527,242	11,771,077	243,835	98%	4,196,608	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.

Central Oregon Intergovernmental Council

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$243,835	$787,778
Allocated pooled OPSRP UAL	296,726	336,667
Side account	0	0
Net unfunded pension actuarial accrued liability	540,561	1,124,445
Combined valuation payroll	4,196,608	4,776,592
Net pension UAL as a percentage of payroll	13%	24%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$58,086	$100,215

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	$254,002	$260,889
Tier 1/Tier 2 valuation payroll	2,013,140	2,127,797
Tier 1/Tier 2 pension normal cost rate	12.62%	12.26%
Tier 1/ Tier 2 Actuarial accrued liability	$11,771,077	$10,991,538
Actuarial asset value	11,527,242	10,203,760
Tier 1/Tier 2 Unfunded actuarial accrued liability	243,835	787,778
Tier 1/ Tier 2 Funded status	98%	93%
Combined valuation payroll	$4,196,608	$4,776,592
Tier 1/Tier 2 UAL as a percentage of payroll	6%	16%
Tier 1/Tier 2 UAL rate	0.08%	0.44%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	36	40
Tier 1/Tier 2 dormant members	30	30
Tier 1/Tier 2 retirees and beneficiaries	54	48

[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	4,196,608	4,776,592
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]	$2,087,932	$2,147,062
2. Employer reserves	6,751,433	5,972,039
3. Benefits in force reserve	2,687,877	2,084,659
4. Total market value of assets ***(1. + 2. + 3.)***	**$11,527,242**	**$10,203,760**

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

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	$10,203,760
2. Regular employer contributions	235,025
3. Benefit payments and expense	(416,095)
4. Adjustments[2]	(32,883)
5. Interest credited	1,537,434
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$11,527,242**

[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	90,073	98,502
Tier 2 Police & Fire	0	0
Tier 2 General Service	163,929	162,387
Total	**$254,002**	**$260,889**

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	$254,002	$254,002	$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	2,355,522	3,004,236
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	3,391,634	3,091,937
▪ **Total Active Members**	**$5,747,156**	**$6,096,173**
Dormant Members	1,691,159	1,382,426
Retired Members and Beneficiaries	4,332,762	3,512,939
Total Actuarial Accrued Liability	**$11,771,077**	**$10,991,538**

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	$11,771,077	$11,771,077	$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	$11,771,077	$10,991,538
2. Actuarial value of assets	11,527,242	10,203,760
3. Unfunded accrued liability *(1. – 2.)*	243,835	787,778
4. Funded percentage *(2. ÷ 1.)*	98%	93%
5. Combined valuation payroll	$4,196,608	$4,776,592
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	6%	16%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$243,835	$17,649
Total				**$243,835**	**$17,649**

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

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

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	$10,991,538
b. Normal cost at December 31, 2012	260,889
c. Benefit payments during 2013	(412,794)
d. Interest at 7.75% to December 31, 2013	856,067
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	11,695,700
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.)*	11,695,700
2. Actuarial accrued liability at December 31, 2013	11,771,077
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(75,377)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	10,203,760
b. Contributions for 2013[1]	235,025
c. Benefit payments and expenses during 2013	(416,095)
d. Interest at 7.75% to December 31, 2013	783,775
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	10,806,466
5. Actuarial value of assets at December 31, 2013	11,527,242
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	720,776
7. Total actuarial gain/(loss) *(3. + 6.)*	**$645,399**

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	**$787,778**
2. Expected increase	101,456
3. Liability (gain)/loss	75,377
4. Asset (gain)/loss	(720,776)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$243,835**

[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	90,073	520,180	17.32%	98,502	671,523	14.67%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	163,929	1,492,960	10.98%	162,387	1,456,274	11.15%
Total	**$254,002**	**$2,013,140**	**12.62%**	**$260,889**	**$2,127,797**	**12.26%**

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	$243,835	$787,778
2. Next year's Tier 1/Tier 2 UAL payment	17,649	57,019
3. Combined valuation payroll	4,196,608	4,776,592
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.42%	1.19%

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	12.62%	12.26%
b. Tier 1/Tier 2 UAL rate	0.42%	1.19%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.19%	13.58%

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	9.70%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	9.70%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.94%
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%)*	6.70%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	12.70%
7. July 1, 2015 total pension rate, before adjustment	13.19%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.49%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.42%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.07%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.70%
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	12.62%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.62%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	12.70%

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	12.62%	12.26%
b. Tier 1/Tier 2 UAL rate	(0.07%)	0.31%
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%)*	12.70%	12.70%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$520,180	$0	$520,180
Tier 2	1,492,960	0	1,492,960
Tier 1/Tier 2 valuation payroll	2,013,140	0	2,013,140
OPSRP valuation payroll	2,183,468	0	2,183,468
Combined valuation payroll	**$4,196,608**	**$0**	**$4,196,608**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	8	28	73	109	10	30	82	122
Police & Fire	0	0	0	0	0	0	0	0
Total	8	28	73	109	10	30	82	122
Active Members with previous service segments with the employer								
General Service	28	18	N/A	46	26	13	N/A	39
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	28	18	N/A	46	26	13	N/A	39
Dormant Members								
General Service	15	15	12	42	14	16	7	37
Police & Fire	0	0	0	0	0	0	0	0
Total	15	15	12	42	14	16	7	37
Retired Members and Beneficiaries								
General Service	50	4	0	54	45	3	0	48
Police & Fire	0	0	0	0	0	0	0	0
Total	50	4	0	54	45	3	0	48
Grand Total Number of Members	**101**	**65**	**85**	**251**	**95**	**62**	**89**	**246**

[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			5	4						**9**
45-49	1	1	3	1						**6**
50-54				2	2	1				**5**
55-59		1	2	1	1		1			**6**
60-64			1	5			1			**7**
65-69			1							**1**
70-74										
75+										
Total	**1**	**3**	**12**	**14**	**3**	**1**	**2**	**0**	**0**	**36**

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	2	1,357
45-49	6	669
50-54	5	434
55-59	5	559
60-64	7	430
65-69	2	1,452
70-74	1	167
75+	2	69
Total	30	597

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	2	716
60-64	16	517
65-69	11	911
70-74	14	612
75-79	6	267
80-84	3	1,052
85-89		
90-94	2	60
95-99		
100+		
Total	54	614

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

Central Oregon Regional Housing Authority/2678
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
Central Oregon Regional Housing Authority/2678

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

Central Oregon Regional Housing Authority -- #2678

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Central Oregon Regional 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 Central Oregon Regional 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 Central Oregon Regional Housing Authority

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	9.87%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(1.89%)	(1.89%)	(1.89%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.59%**	**6.05%**	**10.16%**
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	**9.12%**	**6.50%**	**10.61%**

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 111%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	7.98%	7.98%
Minimum July 1, 2017 Rate	4.98%	1.98%
Maximum July 1, 2017 Rate	10.98%	13.98%

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	$1,388,677	$1,405,586	$16,909	99%	$707,188	2%
12/31/2009	1,673,580	1,552,945	(120,635)	108%	768,732	(16%)
12/31/2010	1,865,855	1,680,739	(185,116)	111%	684,037	(27%)
12/31/2011	1,912,749	1,768,115	(144,634)	108%	812,514	(18%)
12/31/2012	2,154,777	1,718,750	(436,027)	125%	738,745	(59%)
12/31/2013	2,099,560	1,894,256	(205,304)	111%	727,584	(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.

Central Oregon Regional Housing Authority

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	($205,304)	($436,027)
Allocated pooled OPSRP UAL	51,445	52,069
Side account	0	0
Net unfunded pension actuarial accrued liability	(153,859)	(383,958)
Combined valuation payroll	727,584	738,745
Net pension UAL as a percentage of payroll	(21%)	(52%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,071	$15,499

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	$8,208	$28,516
Tier 1/Tier 2 valuation payroll	83,140	216,552
Tier 1/Tier 2 pension normal cost rate	9.87%	13.17%
Tier 1/ Tier 2 Actuarial accrued liability	$1,894,256	$1,718,750
Actuarial asset value	2,099,560	2,154,777
Tier 1/Tier 2 Unfunded actuarial accrued liability	(205,304)	(436,027)
Tier 1/ Tier 2 Funded status	111%	125%
Combined valuation payroll	$727,584	$738,745
Tier 1/Tier 2 UAL as a percentage of payroll	(28%)	(59%)
Tier 1/Tier 2 UAL rate	(1.89%)	(4.76%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members[1]	1	2
Tier 1/Tier 2 dormant members	7	9
Tier 1/Tier 2 retirees and beneficiaries	9	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	727,584	738,745
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	0.00%	0.00%

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

Tier 1/Tier 2 Valuation Results

Assets

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

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

	December 31, 2013	December 31, 2012
1. Member reserves[1]	$307,551	$608,236
2. Employer reserves	1,091,780	1,370,924
3. Benefits in force reserve	700,229	175,617
4. Total market value of assets ***(1. + 2. + 3.)***	**$2,099,560**	**$2,154,777**

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	$2,154,777
2.	Regular employer contributions	(750)
3.	Benefit payments and expense	(108,398)
4.	Adjustments[2]	(236,633)
5.	Interest credited	290,565
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$2,099,560**

[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	20,540
Tier 2 Police & Fire	0	0
Tier 2 General Service	8,208	7,976
Total	**$8,208**	**$28,516**

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	$8,208	$8,208	$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	354,883	963,614
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	259,071	206,802
▪ **Total Active Members**	**$613,954**	**$1,170,416**
Dormant Members	151,557	252,396
Retired Members and Beneficiaries	1,128,745	295,938
Total Actuarial Accrued Liability	**$1,894,256**	**$1,718,750**

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	$1,894,256	$1,894,256	$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	$1,894,256	$1,718,750
2. Actuarial value of assets	2,099,560	2,154,777
3. Unfunded accrued liability *(1. – 2.)*	(205,304)	(436,027)
4. Funded percentage *(2. ÷ 1.)*	111%	125%
5. Combined valuation payroll	$727,584	$738,745
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(28%)	(59%)

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	($205,304)	($14,860)
Total				**($205,304)**	**($14,860)**

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	$1,718,750
b. Normal cost at December 31, 2012	28,516
c. Benefit payments during 2013	(107,539)
d. Interest at 7.75% to December 31, 2013	131,246
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,770,973
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.)*	1,770,973
2. Actuarial accrued liability at December 31, 2013	1,894,256
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(123,283)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,154,777
b. Contributions for 2013[1]	(750)
c. Benefit payments and expenses during 2013	(108,398)
d. Interest at 7.75% to December 31, 2013	162,766
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	2,208,394
5. Actuarial value of assets at December 31, 2013	2,099,560
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	(108,833)
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($232,116)**

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	**($436,027)**
2. Expected increase	(1,393)
3. Liability (gain)/loss	123,283
4. Asset (gain)/loss	108,833
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($205,304)**

[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%	20,540	133,356	15.40%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	8,208	83,140	9.87%	7,976	83,196	9.59%
Total	**$8,208**	**$83,140**	**9.87%**	**$28,516**	**$216,552**	**13.17%**

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	($205,304)	($436,027)
2. Next year's Tier 1/Tier 2 UAL payment	(14,860)	(31,560)
3. Combined valuation payroll	727,584	738,745
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(2.04%)	(4.27%)

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	9.87%	13.17%
b. Tier 1/Tier 2 UAL rate	(2.04%)	(4.27%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	7.98%	9.03%

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	111%
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	7.98%
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	7.98%
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	9.87%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	9.87%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	7.98%

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	9.87%	13.17%
b. Tier 1/Tier 2 UAL rate	(2.04%)	(4.89%)
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%)*	7.98%	8.41%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	83,140	0	83,140
Tier 1/Tier 2 valuation payroll	83,140	0	83,140
OPSRP valuation payroll	644,444	0	644,444
Combined valuation payroll	**$727,584**	**$0**	**$727,584**

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	11	12	1	1	10	12
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	11	12	1	1	10	12
Active Members with previous service segments with the employer								
General Service	5	4	N/A	9	2	2	N/A	4
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	5	4	N/A	9	2	2	N/A	4
Dormant Members								
General Service	4	3	2	9	5	4	1	10
Police & Fire	0	0	0	0	0	0	0	0
Total	4	3	2	9	5	4	1	10
Retired Members and Beneficiaries								
General Service	6	3	0	9	5	2	0	7
Police & Fire	0	0	0	0	0	0	0	0
Total	6	3	0	9	5	2	0	7
Grand Total Number of Members	**15**	**11**	**13**	**39**	**13**	**9**	**11**	**33**

[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										
45-49										
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	1	0
45-49	2	51
50-54	1	696
55-59	1	419
60-64		
65-69	1	50
70-74		
75+	1	488
Total	7	251

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	2	2,489
60-64		
65-69	4	414
70-74	2	210
75-79	1	8
80-84		
85-89		
90-94		
95-99		
100+		
Total	9	785

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

Chiloquin Agency Lake Rural Fire Protection District/2645
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
Chiloquin Agency Lake Rural Fire Protection District/2645

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

Chiloquin Agency Lake Rural Fire Protection District -- #2645

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Chiloquin Agency Lake 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 Chiloquin Agency Lake 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 Chiloquin Agency Lake Rural Fire Protection District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	18.93%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(5.42%)	(5.42%)	(5.42%)
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%**	**2.52%**	**6.63%**
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%**	**2.97%**	**7.08%**

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 101%.

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	$183,842	$294,434	$110,592	62%	$89,104	124%
12/31/2009	225,758	274,252	48,494	82%	91,355	53%
12/31/2010	261,306	306,711	45,405	85%	94,590	48%
12/31/2011	279,554	332,887	53,333	84%	94,119	57%
12/31/2012	334,249	359,616	25,367	93%	98,398	26%
12/31/2013	396,856	391,591	(5,265)	101%	99,051	(5%)

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.

Chiloquin Agency Lake Rural Fire Protection District

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	($5,265)	$25,367
Allocated pooled OPSRP UAL	7,004	6,935
Side account	0	0
Net unfunded pension actuarial accrued liability	1,739	32,302
Combined valuation payroll	99,051	98,398
Net pension UAL as a percentage of payroll	2%	33%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,371	$2,064

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	$18,747	$18,171
Tier 1/Tier 2 valuation payroll	99,051	98,398
Tier 1/Tier 2 pension normal cost rate	18.93%	18.47%
Tier 1/ Tier 2 Actuarial accrued liability	$391,591	$359,616
Actuarial asset value	396,856	334,249
Tier 1/Tier 2 Unfunded actuarial accrued liability	(5,265)	25,367
Tier 1/ Tier 2 Funded status	101%	93%
Combined valuation payroll	$99,051	$98,398
Tier 1/Tier 2 UAL as a percentage of payroll	(5%)	26%
Tier 1/Tier 2 UAL rate	(5.42%)	(4.96%)
(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	1	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	99,051	98,398
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]	$83,204	$74,912
2. Employer reserves	312,873	259,337
3. Benefits in force reserve	779	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$396,856**	**$334,249**

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	$334,249
2.	Regular employer contributions	11,905
3.	Benefit payments and expense	(121)
4.	Adjustments [2]	212
5.	Interest credited	50,612
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$396,856**

[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	$15,971	$15,268
Tier 1 General Service	0	179
Tier 2 Police & Fire	0	0
Tier 2 General Service	2,776	2,724
Total	**$18,747**	**$18,171**

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	$18,747	$18,747	$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	$345,388	$314,212
▪ Tier 1 General Service	0	5,499
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	21,595	18,182
▪ **Total Active Members**	**$366,983**	**$337,893**
Dormant Members	23,352	21,723
Retired Members and Beneficiaries	1,256	0
Total Actuarial Accrued Liability	**$391,591**	**$359,616**

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	$391,591	$391,591	$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	$391,591	$359,616
2. Actuarial value of assets	396,856	334,249
3. Unfunded accrued liability *(1. – 2.)*	(5,265)	25,367
4. Funded percentage *(2. ÷ 1.)*	101%	93%
5. Combined valuation payroll	$99,051	$98,398
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(5%)	26%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	($5,265)	($381)
Total				**($5,265)**	**($381)**

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	$359,616
b. Normal cost at December 31, 2012	18,171
c. Benefit payments during 2013	(120)
d. Interest at 7.75% to December 31, 2013	29,274
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	406,941
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.)*	406,941
2. Actuarial accrued liability at December 31, 2013	391,591
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	15,350
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	334,249
b. Contributions for 2013[1]	11,905
c. Benefit payments and expenses during 2013	(121)
d. Interest at 7.75% to December 31, 2013	26,361
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	372,393
5. Actuarial value of assets at December 31, 2013	396,856
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	24,463
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$39,813**

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	**$25,367**
2. Expected increase	9,181
3. Liability (gain)/loss	(15,350)
4. Asset (gain)/loss	(24,463)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($5,265)**

[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	$15,971	$67,530	23.65%	$15,268	$66,257	23.04%
Tier 1 General Service	0	0	0.00%	179	838	21.36%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	2,776	31,521	8.81%	2,724	31,303	8.70%
Total	**$18,747**	**$99,051**	**18.93%**	**$18,171**	**$98,398**	**18.47%**

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	($5,265)	$25,367
2. Next year's Tier 1/Tier 2 UAL payment	(381)	1,836
3. Combined valuation payroll	99,051	98,398
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.38%)	1.87%

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	18.93%	18.47%
b. Tier 1/Tier 2 UAL rate	(0.38%)	1.87%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	18.70%	20.47%

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	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	101%
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	18.70%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(5.19%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(0.38%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(5.57%)
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	18.93%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	18.93%
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	18.93%	18.47%
b. Tier 1/Tier 2 UAL rate	(5.57%)	(5.09%)
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%)*	13.51%	13.51%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$67,530	$67,530
Tier 2	31,521	0	31,521
Tier 1/Tier 2 valuation payroll	31,521	67,530	99,051
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$31,521**	**$67,530**	**$99,051**

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	0	1	1	0	0	1
Total	1	1	0	2	1	1	0	2
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	1	0	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
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	1	0	0	1	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	0	0	0
Grand Total Number of Members	**3**	**1**	**0**	**4**	**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

	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										
40-44										
45-49										
50-54										
55-59							1			**1**
60-64										
65-69										
70-74										
75+										
Total	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**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	1	156
65-69		
70-74		
75+		
Total	1	156

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	8
60-64		
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	8

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

City of Athena/2167
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
City of Athena/2167

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
City of Athena/2167

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

City of Athena -- #2167

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Athena 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 City of Athena.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Athena

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	10.46%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(4.08%)	(4.08%)	(4.08%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**6.99%**	**3.86%**	**7.97%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**7.52%**	**4.31%**	**8.42%**

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

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

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 114%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	6.38%	6.38%
Minimum July 1, 2017 Rate	3.38%	0.38%
Maximum July 1, 2017 Rate	9.38%	12.38%

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	$1,076,023	$1,190,413	$114,390	90%	$266,144	43%
12/31/2009	1,219,634	1,196,140	(23,494)	102%	224,568	(10%)
12/31/2010	1,308,772	1,215,902	(92,870)	108%	286,337	(32%)
12/31/2011	1,296,055	1,269,742	(26,313)	102%	272,640	(10%)
12/31/2012	1,436,547	1,326,518	(110,029)	108%	338,455	(33%)
12/31/2013	1,616,907	1,412,565	(204,342)	114%	349,824	(58%)

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.

City of Athena

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	($204,342)	($110,029)
Allocated pooled OPSRP UAL	24,735	23,855
Side account	0	0
Net unfunded pension actuarial accrued liability	(179,607)	(86,174)
Combined valuation payroll	349,824	338,455
Net pension UAL as a percentage of payroll	(51%)	(25%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,842	$7,101

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	$25,460	$17,768
Tier 1/Tier 2 valuation payroll	243,310	189,029
Tier 1/Tier 2 pension normal cost rate	10.46%	9.40%
Tier 1/ Tier 2 Actuarial accrued liability	$1,412,565	$1,326,518
Actuarial asset value	1,616,907	1,436,547
Tier 1/Tier 2 Unfunded actuarial accrued liability	(204,342)	(110,029)
Tier 1/ Tier 2 Funded status	114%	108%
Combined valuation payroll	$349,824	$338,455
Tier 1/Tier 2 UAL as a percentage of payroll	(58%)	(33%)
Tier 1/Tier 2 UAL rate	(4.08%)	(2.22%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	5	4
Tier 1/Tier 2 dormant members	3	3
Tier 1/Tier 2 retirees and beneficiaries	4	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	349,824	338,455
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]	$187,777	$170,161
2. Employer reserves	944,138	806,523
3. Benefits in force reserve	484,992	459,863
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,616,907**	**$1,436,547**

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	$1,436,547
2.	Regular employer contributions	10,579
3.	Benefit payments and expense	(75,079)
4.	Adjustments [2]	35,730
5.	Interest credited	209,130
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,616,907**

[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	$7,226	$7,087
Tier 1 General Service	3,197	3,077
Tier 2 Police & Fire	7,128	0
Tier 2 General Service	7,909	7,604
Total	**$25,460**	**$17,768**

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	$25,460	$25,460	$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	$233,244	$197,684
▪ Tier 1 General Service	74,826	67,686
▪ Tier 2 Police & Fire	7,455	0
▪ Tier 2 General Service	159,338	141,930
▪ **Total Active Members**	**$474,863**	**$407,300**
Dormant Members	155,912	144,285
Retired Members and Beneficiaries	781,790	774,933
Total Actuarial Accrued Liability	**$1,412,565**	**$1,326,518**

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	$1,412,565	$1,412,565	$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	$1,412,565	$1,326,518
2. Actuarial value of assets	1,616,907	1,436,547
3. Unfunded accrued liability *(1. – 2.)*	(204,342)	(110,029)
4. Funded percentage *(2. ÷ 1.)*	114%	108%
5. Combined valuation payroll	$349,824	$338,455
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(58%)	(33%)

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	($204,342)	($14,790)
Total				**($204,342)**	**($14,790)**

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	$1,326,518
b. Normal cost at December 31, 2012	17,768
c. Benefit payments during 2013	(74,483)
d. Interest at 7.75% to December 31, 2013	101,296
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,371,099
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.)*	1,371,099
2. Actuarial accrued liability at December 31, 2013	1,412,565
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(41,466)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,436,547
b. Contributions for 2013[1]	10,579
c. Benefit payments and expenses during 2013	(75,079)
d. Interest at 7.75% to December 31, 2013	108,833
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,480,880
5. Actuarial value of assets at December 31, 2013	1,616,907
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	136,027
7. Total actuarial gain/(loss) *(3. + 6.)*	**$94,561**

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	**($110,029)**
2. Expected increase	248
3. Liability (gain)/loss	41,466
4. Asset (gain)/loss	(136,027)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($204,342)**

[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	$7,226	$62,768	11.51%	$7,087	$61,869	11.45%
Tier 1 General Service	3,197	33,708	9.48%	3,077	32,552	9.45%
Tier 2 Police & Fire	7,128	50,082	14.23%	0	0	0.00%
Tier 2 General Service	7,909	96,752	8.17%	7,604	94,608	8.04%
Total	**$25,460**	**$243,310**	**10.46%**	**$17,768**	**$189,029**	**9.40%**

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	($204,342)	($110,029)
2. Next year's Tier 1/Tier 2 UAL payment	(14,790)	(7,964)
3. Combined valuation payroll	349,824	338,455
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(4.23%)	(2.35%)

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	10.46%	9.40%
b. Tier 1/Tier 2 UAL rate	(4.23%)	(2.35%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	6.38%	7.18%

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	114%
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	6.38%
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	(4.23%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(4.23%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	6.38%
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	10.46%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	10.46%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	6.38%

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	10.46%	9.40%
b. Tier 1/Tier 2 UAL rate	(4.23%)	(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%)*	6.38%	7.18%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$33,708	$62,768	$96,476
Tier 2	96,752	50,082	146,834
Tier 1/Tier 2 valuation payroll	130,460	112,850	243,310
OPSRP valuation payroll	106,514	0	106,514
Combined valuation payroll	**$236,974**	**$112,850**	**$349,824**

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	2	2	5	1	2	2	5
Police & Fire	1	1	0	2	1	0	1	2
Total	2	3	2	7	2	2	3	7
Active Members with previous service segments with the employer								
General Service	0	1	N/A	1	0	0	N/A	0
Police & Fire	2	0	N/A	2	0	0	N/A	0
Total	2	1	N/A	3	0	0	N/A	0
Dormant Members								
General Service	1	2	1	4	1	2	1	4
Police & Fire	0	0	0	0	0	0	0	0
Total	1	2	1	4	1	2	1	4
Retired Members and Beneficiaries								
General Service	2	0	0	2	2	0	0	2
Police & Fire	1	1	0	2	1	1	0	2
Total	3	1	0	4	3	1	0	4
Grand Total Number of Members	**8**	**7**	**3**	**18**	**6**	**5**	**4**	**15**

[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			1							**1**
45-49			2							**2**
50-54										
55-59										
60-64					1					**1**
65-69										
70-74										
75+										
Total	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**5**

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	1,837
50-54	1	374
55-59		
60-64		
65-69		
70-74		
75+	1	76
Total	3	762

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	5
60-64	1	3,415
65-69	1	1,389
70-74		
75-79		
80-84		
85-89	1	367
90-94		
95-99		
100+		
Total	4	1,294

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

City of Beaverton/2106
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
City of Beaverton/2106

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

City of Beaverton -- #2106

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Beaverton 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 City of Beaverton.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Beaverton

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.19%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.57%)	(0.57%)	(0.57%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.23%**	**7.37%**	**11.48%**
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	**14.76%**	**7.82%**	**11.93%**

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	13.62%	13.62%
Minimum July 1, 2017 Rate	10.62%	7.62%
Maximum July 1, 2017 Rate	16.62%	19.62%

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	$124,870,860	$156,712,907	$31,842,047	80%	$28,710,908	111%
12/31/2009	141,726,062	165,397,635	23,671,573	86%	31,185,880	76%
12/31/2010	152,182,765	174,931,684	22,748,919	87%	32,532,597	70%
12/31/2011	146,862,259	181,185,933	34,323,674	81%	32,648,286	105%
12/31/2012	159,589,702	181,388,229	21,798,527	88%	34,468,039	63%
12/31/2013	174,455,205	191,831,494	17,376,289	91%	36,355,074	48%

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.

City of Beaverton

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$17,376,289	$21,798,527
Allocated pooled OPSRP UAL	2,570,525	2,429,402
Side account	0	0
Net unfunded pension actuarial accrued liability	19,946,814	24,227,929
Combined valuation payroll	36,355,074	34,468,039
Net pension UAL as a percentage of payroll	55%	70%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$503,193	$723,154

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	$2,980,970	$3,057,468
Tier 1/Tier 2 valuation payroll	21,006,566	21,123,649
Tier 1/Tier 2 pension normal cost rate	14.19%	14.47%
Tier 1/ Tier 2 Actuarial accrued liability	$191,831,494	$181,388,229
Actuarial asset value	174,455,205	159,589,702
Tier 1/Tier 2 Unfunded actuarial accrued liability	17,376,289	21,798,527
Tier 1/ Tier 2 Funded status	91%	88%
Combined valuation payroll	$36,355,074	$34,468,039
Tier 1/Tier 2 UAL as a percentage of payroll	48%	63%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(0.57%)	(0.85%)
Tier 1/Tier 2 active members [1]	274	286
Tier 1/Tier 2 dormant members	133	150
Tier 1/Tier 2 retirees and beneficiaries	392	350

[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	36,355,074	34,468,039
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]	$25,162,334	$27,937,228
2. Employer reserves	80,928,668	74,804,458
3. Benefits in force reserve	68,364,203	56,848,016
4. Total market value of assets ***(1. + 2. + 3.)***	**$174,455,205**	**$159,589,702**

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	$159,589,702
2. Regular employer contributions	2,341,621
3. Benefit payments and expense	(10,583,065)
4. Adjustments[2]	387,810
5. Interest credited	22,719,138
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$174,455,205**

[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	$526,012	$531,601
Tier 1 General Service	955,092	1,060,184
Tier 2 Police & Fire	646,526	627,469
Tier 2 General Service	853,340	838,214
Total	**$2,980,970**	**$3,057,468**

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	$2,980,970	$2,980,970	$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	$14,557,567	$14,273,001
▪ Tier 1 General Service	29,706,032	33,259,506
▪ Tier 2 Police & Fire	9,858,557	8,831,377
▪ Tier 2 General Service	15,782,454	14,272,033
▪ **Total Active Members**	**$69,904,610**	**$70,635,917**
Dormant Members	11,726,190	14,955,555
Retired Members and Beneficiaries	110,200,694	95,796,757
Total Actuarial Accrued Liability	**$191,831,494**	**$181,388,229**

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	$191,831,494	$191,831,494	$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	$191,831,494	$181,388,229
2. Actuarial value of assets	174,455,205	159,589,702
3. Unfunded accrued liability *(1. – 2.)*	17,376,289	21,798,527
4. Funded percentage *(2. ÷ 1.)*	91%	88%
5. Combined valuation payroll	$36,355,074	$34,468,039
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	48%	63%

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	$17,376,289	$1,257,693
Total				**$17,376,289**	**$1,257,693**

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	$181,388,229
b. Normal cost at December 31, 2012	3,057,468
c. Benefit payments during 2013	(10,499,124)
d. Interest at 7.75% to December 31, 2013	13,887,700
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	187,834,273
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.)*	187,834,273
2. Actuarial accrued liability at December 31, 2013	191,831,494
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(3,997,221)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	159,589,702
b. Contributions for 2013[1]	2,341,621
c. Benefit payments and expenses during 2013	(10,583,065)
d. Interest at 7.75% to December 31, 2013	12,048,846
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	163,397,104
5. Actuarial value of assets at December 31, 2013	174,455,205
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	11,058,102
7. Total actuarial gain/(loss) *(3. + 6.)*	**$7,060,881**

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	**$21,798,527**
2. Expected increase	2,638,643
3. Liability (gain)/loss	3,997,221
4. Asset (gain)/loss	(11,058,102)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$17,376,289**

[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	$526,012	$3,008,061	17.49%	$531,601	$3,003,015	17.70%
Tier 1 General Service	955,092	6,036,672	15.82%	1,060,184	6,450,697	16.44%
Tier 2 Police & Fire	646,526	4,245,959	15.23%	627,469	4,123,650	15.22%
Tier 2 General Service	853,340	7,715,874	11.06%	838,214	7,546,287	11.11%
Total	**$2,980,970**	**$21,006,566**	**14.19%**	**$3,057,468**	**$21,123,649**	**14.47%**

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	$17,376,289	$21,798,527
2. Next year's Tier 1/Tier 2 UAL payment	1,257,693	1,577,774
3. Combined valuation payroll	36,355,074	34,468,039
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.46%	4.58%

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	14.19%	14.47%
b. Tier 1/Tier 2 UAL rate	3.46%	4.58%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	17.80%	19.18%

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	10.62%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.62%
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	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%)*	7.62%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.62%
7. July 1, 2015 total pension rate, before adjustment	17.80%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(4.18%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.46%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.72%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.62%
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	14.19%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.19%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.62%

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	14.19%	14.47%
b. Tier 1/Tier 2 UAL rate	(0.72%)	(0.98%)
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%)*	13.62%	13.62%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$6,036,672	$3,008,061	$9,044,733
Tier 2	7,715,874	4,245,959	11,961,833
Tier 1/Tier 2 valuation payroll	13,752,546	7,254,020	21,006,566
OPSRP valuation payroll	9,869,519	5,478,989	15,348,508
Combined valuation payroll	**$23,622,065**	**$12,733,009**	**$36,355,074**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	84	117	183	384	91	119	169	379
Police & Fire	29	44	66	139	31	45	62	138
Total	113	161	249	523	122	164	231	517
Active Members with previous service segments with the employer								
General Service	67	52	N/A	119	63	42	N/A	105
Police & Fire	8	7	N/A	15	10	5	N/A	15
Total	75	59	N/A	134	73	47	N/A	120
Dormant Members								
General Service	57	55	15	127	73	55	9	137
Police & Fire	14	7	3	24	15	7	2	24
Total	71	62	18	151	88	62	11	161
Retired Members and Beneficiaries								
General Service	251	28	3	282	212	27	3	242
Police & Fire	112	1	0	113	106	5	0	111
Total	363	29	3	395	318	32	3	353
Grand Total Number of Members	**622**	**311**	**270**	**1,203**	**601**	**305**	**245**	**1,151**

[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**
30-34		1	7							**8**
35-39	1	4	19	2						**26**
40-44		2	22	19	6					**49**
45-49			18	18	11	3	1			**51**
50-54		3	19	13	11	10				**56**
55-59		2	7	10	6	2	4			**31**
60-64			12	13	5	5	3			**38**
65-69			8	3	2					**13**
70-74			1							**1**
75+										
Total	**1**	**13**	**113**	**78**	**41**	**20**	**8**	**0**	**0**	**274**

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	75
35-39	5	250
40-44	19	1,048
45-49	25	1,029
50-54	27	1,530
55-59	30	779
60-64	17	747
65-69	7	139
70-74	1	727
75+		
Total	133	948

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	2,167
45-49	1	3,863
50-54	11	3,475
55-59	54	2,864
60-64	86	2,407
65-69	98	1,768
70-74	76	1,688
75-79	34	1,389
80-84	19	1,001
85-89	8	700
90-94	4	679
95-99		
100+		
Total	392	1,995

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

City of Bend/2107
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
City of Bend/2107

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

City of Bend -- #2107

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Bend 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 City of Bend.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Bend

	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]	3.94%	3.94%	3.94%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	(3.54%)	(3.54%)	(3.54%)
Net pension contribution rate	**15.25%**	**8.34%**	**12.45%**
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	**15.78%**	**8.79%**	**12.90%**

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

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

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	18.18%	18.18%
Minimum July 1, 2017 Rate	14.54%	10.90%
Maximum July 1, 2017 Rate	21.82%	25.46%

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	$93,975,721	$113,200,430	$19,224,709	83%	$30,478,644	63%
12/31/2009	107,912,057	121,599,417	13,687,359	89%	30,492,774	45%
12/31/2010	116,318,438	128,704,772	12,386,334	90%	31,485,779	39%
12/31/2011	113,904,241	132,422,315	18,518,073	86%	31,464,101	59%
12/31/2012	126,057,712	137,537,729	11,480,017	92%	32,558,682	35%
12/31/2013	139,836,995	144,653,986	4,816,991	97%	33,233,981	14%

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.

City of Bend

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	$17,401,261	$23,181,695
Allocated pooled OPSRP UAL	2,349,845	2,294,826
Side account	12,584,270	11,701,678
Net unfunded pension actuarial accrued liability	7,166,836	13,774,843
Combined valuation payroll	33,233,981	32,558,682
Net pension UAL as a percentage of payroll	22%	42%
Calculated side account rate relief	(3.54%)	(3.19%)
Allocated pooled RHIA UAL	$459,994	$683,095

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	$2,926,325	$2,951,034
Tier 1/Tier 2 valuation payroll	20,544,388	20,798,540
Tier 1/Tier 2 pension normal cost rate	14.24%	14.19%
Tier 1/ Tier 2 Actuarial accrued liability	$144,653,986	$137,537,729
Actuarial asset value	127,252,725	114,356,034
Tier 1/Tier 2 Unfunded actuarial accrued liability	17,401,261	23,181,695
Tier 1/ Tier 2 Funded status	88%	83%
Combined valuation payroll	$33,233,981	$32,558,682
Tier 1/Tier 2 UAL as a percentage of payroll	52%	71%
Tier 1/Tier 2 UAL rate	3.94%	4.21%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	242	255
Tier 1/Tier 2 dormant members	75	90
Tier 1/Tier 2 retirees and beneficiaries	253	228

[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**	**$11,701,678**	**$11,701,678**
2. Deposits made during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(915,478)	(915,478)
5. Side account earnings during 2013		1,799,070	1,799,070
6. Side account as of December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***		**$12,584,270**	**$12,584,270**

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side account 1	$12,584,270	$11,701,678
Side account 2	0	0
Side account 3	0	0
Total	**$12,584,270**	**$11,701,678**

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	$12,584,270	$11,701,678
2. Combined valuation payroll	33,233,981	32,558,682
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	(3.54%)	(3.19%)

[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]	$16,342,573	$16,739,745
2. Employer reserves	63,424,206	56,096,317
3. Benefits in force reserve	47,485,946	41,519,973
4. Total market value of assets ***(1. + 2. + 3.)***	**$127,252,725**	**$114,356,034**

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	$114,356,034
2. Regular employer contributions	2,552,351
3. Benefit payments and expense	(7,351,024)
4. Adjustments[2]	(86,322)
5. Interest credited	16,866,208
6. Total transferred from side accounts	915,478
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$127,252,725**

[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	$965,990	$962,123
Tier 1 General Service	448,649	513,985
Tier 2 Police & Fire	863,748	830,194
Tier 2 General Service	647,938	644,732
Total	**$2,926,325**	**$2,951,034**

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	$2,926,325	$2,926,325	$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	$27,748,669	$26,048,196
▪ Tier 1 General Service	9,285,480	10,064,241
▪ Tier 2 Police & Fire	11,668,948	10,261,728
▪ Tier 2 General Service	10,514,966	9,544,451
▪ **Total Active Members**	**$59,218,063**	**$55,918,616**
Dormant Members	8,890,246	11,652,226
Retired Members and Beneficiaries	76,545,677	69,966,887
Total Actuarial Accrued Liability	**$144,653,986**	**$137,537,729**

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	$144,653,986	$144,653,986	$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	$144,653,986	$137,537,729
2. Actuarial value of assets	127,252,725	114,356,034
3. Unfunded accrued liability *(1. – 2.)*	17,401,261	23,181,695
4. Funded percentage *(2. ÷ 1.)*	88%	83%
5. Combined valuation payroll	$33,233,981	$32,558,682
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	52%	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	$17,401,261	$1,259,501
Total				**$17,401,261**	**$1,259,501**

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	$137,537,729
b. Normal cost at December 31, 2012	2,951,034
c. Benefit payments during 2013	(7,292,718)
d. Interest at 7.75% to December 31, 2013	10,605,286
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	143,801,331
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.)*	143,801,331
2. Actuarial accrued liability at December 31, 2013	144,653,986
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(852,655)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	114,356,034
b. Contributions for 2013[1]	3,467,829
c. Benefit payments and expenses during 2013	(7,351,024)
d. Interest at 7.75% to December 31, 2013	8,712,119
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	119,184,958
5. Actuarial value of assets at December 31, 2013	127,252,725
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	8,067,767
7. Total actuarial gain/(loss) *(3. + 6.)*	**$7,215,112**

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	**$23,181,695**
2. Expected increase	1,434,678
3. Liability (gain)/loss	852,655
4. Asset (gain)/loss	(8,067,767)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$17,401,261**

[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	$965,990	$5,356,995	18.03%	$962,123	$5,345,661	18.00%
Tier 1 General Service	448,649	3,205,334	14.00%	513,985	3,745,811	13.72%
Tier 2 Police & Fire	863,748	5,732,250	15.07%	830,194	5,486,022	15.13%
Tier 2 General Service	647,938	6,249,809	10.37%	644,732	6,221,046	10.36%
Total	**$2,926,325**	**$20,544,388**	**14.24%**	**$2,951,034**	**$20,798,540**	**14.19%**

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	$17,401,261	$23,181,695
2. Next year's Tier 1/Tier 2 UAL payment	1,259,501	1,677,888
3. Combined valuation payroll	33,233,981	32,558,682
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.79%	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	14.24%	14.19%
b. Tier 1/Tier 2 UAL rate	3.79%	5.15%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	18.18%	19.47%

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	12.30%
2. Employer contribution rate attributable to side accounts	(3.03%)
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	15.33%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.07%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.07%
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.)*	3.07%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	12.26%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	18.40%
7. July 1, 2015 total pension rate, before adjustment	18.18%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.79%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	3.79%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	18.18%
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.)*	18.18%

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%	14.19%
b. Tier 1/Tier 2 UAL rate	3.79%	4.08%
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%)*	18.18%	18.40%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$3,205,334	$5,356,995	$8,562,329
Tier 2	6,249,809	5,732,250	11,982,059
Tier 1/Tier 2 valuation payroll	9,455,143	11,089,245	20,544,388
OPSRP valuation payroll	9,039,214	3,650,379	12,689,593
Combined valuation payroll	**$18,494,357**	**$14,739,624**	**$33,233,981**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	43	90	142	275	48	94	133	275
Police & Fire	50	59	43	152	53	60	42	155
Total	93	149	185	427	101	154	175	430
Active Members with previous service segments with the employer								
General Service	13	17	N/A	30	9	11	N/A	20
Police & Fire	7	4	N/A	11	5	2	N/A	7
Total	20	21	N/A	41	14	13	N/A	27
Dormant Members								
General Service	32	29	10	71	44	31	10	85
Police & Fire	9	5	3	17	12	3	2	17
Total	41	34	13	88	56	34	12	102
Retired Members and Beneficiaries								
General Service	133	15	2	150	117	15	1	133
Police & Fire	105	0	0	105	96	0	0	96
Total	238	15	2	255	213	15	1	229
Grand Total Number of Members	**392**	**219**	**200**	**811**	**384**	**216**	**188**	**788**

[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	6							**8**
35-39		1	40	8	1					**50**
40-44		3	27	15						**45**
45-49			14	12	15					**41**
50-54		2	12	8	11	3	3			**39**
55-59		1	12	5	6	8	4			**36**
60-64			4	7	3		2			**16**
65-69			4	2					1	**7**
70-74										
75+										
Total	**0**	**9**	**119**	**57**	**36**	**11**	**9**	**0**	**1**	**242**

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	338
35-39	6	1,006
40-44	9	1,721
45-49	18	1,489
50-54	16	1,477
55-59	16	1,206
60-64	6	1,307
65-69	2	258
70-74		
75+		
Total	75	1,337

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	2	1,947
45-49	3	1,313
50-54	5	3,288
55-59	28	2,222
60-64	68	2,577
65-69	54	2,261
70-74	39	2,244
75-79	25	1,741
80-84	12	1,590
85-89	14	872
90-94	2	990
95-99	1	257
100+		
Total	253	2,167

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

City of Canyonville/2149
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
City of Canyonville/2149

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

City of Canyonville -- #2149

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Canyonville 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 City of Canyonville.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Canyonville

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.45%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.31%)	(0.31%)	(0.31%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**13.75%**	**7.63%**	**11.74%**
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	**14.28%**	**8.08%**	**12.19%**

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	13.14%	13.14%
Minimum July 1, 2017 Rate	10.14%	7.14%
Maximum July 1, 2017 Rate	16.14%	19.14%

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	$1,112,505	$1,482,576	$370,071	75%	$270,288	137%
12/31/2009	1,203,798	1,536,571	332,773	78%	334,911	99%
12/31/2010	1,263,089	1,602,219	339,130	79%	340,758	100%
12/31/2011	1,221,583	1,673,061	451,478	73%	309,713	146%
12/31/2012	1,333,888	1,724,348	390,460	77%	314,703	124%
12/31/2013	1,474,051	1,627,567	153,516	91%	309,521	50%

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.

City of Canyonville

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$153,516	$390,460
Allocated pooled OPSRP UAL	21,885	22,181
Side account	0	0
Net unfunded pension actuarial accrued liability	175,401	412,641
Combined valuation payroll	309,521	314,703
Net pension UAL as a percentage of payroll	57%	131%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$4,284	$6,603

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	$24,338	$24,235
Tier 1/Tier 2 valuation payroll	180,953	182,310
Tier 1/Tier 2 pension normal cost rate	13.45%	13.29%
Tier 1/ Tier 2 Actuarial accrued liability	$1,627,567	$1,724,348
Actuarial asset value	1,474,051	1,333,888
Tier 1/Tier 2 Unfunded actuarial accrued liability	153,516	390,460
Tier 1/ Tier 2 Funded status	91%	77%
Combined valuation payroll	$309,521	$314,703
Tier 1/Tier 2 UAL as a percentage of payroll	50%	124%
Tier 1/Tier 2 UAL rate	(0.31%)	(0.15%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	4	4
Tier 1/Tier 2 dormant members	2	3
Tier 1/Tier 2 retirees and beneficiaries	21	21

[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	309,521	314,703
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]	$115,922	$106,372
2. Employer reserves	745,940	636,066
3. Benefits in force reserve	612,189	591,450
4. Total market value of assets *(1. + 2. + 3.)*	**$1,474,051**	**$1,333,888**

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	$1,333,888
2.	Regular employer contributions	15,196
3.	Benefit payments and expense	(94,769)
4.	Adjustments [2]	22,446
5.	Interest credited	197,290
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,474,051**

[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	7,683	7,840
Tier 2 Police & Fire	0	0
Tier 2 General Service	16,655	16,395
Total	**$24,338**	**$24,235**

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	$24,338	$24,338	$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	$12,022	$11,391
▪ Tier 1 General Service	40,753	36,176
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	522,375	480,741
▪ **Total Active Members**	**$575,150**	**$528,308**
Dormant Members	65,590	199,365
Retired Members and Beneficiaries	986,827	996,675
Total Actuarial Accrued Liability	**$1,627,567**	**$1,724,348**

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	$1,627,567	$1,627,567	$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	$1,627,567	$1,724,348
2. Actuarial value of assets	1,474,051	1,333,888
3. Unfunded accrued liability *(1. – 2.)*	153,516	390,460
4. Funded percentage *(2. ÷ 1.)*	91%	77%
5. Combined valuation payroll	$309,521	$314,703
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	50%	124%

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	$153,516	$11,111
Total				**$153,516**	**$11,111**

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	$1,724,348
b. Normal cost at December 31, 2012	24,235
c. Benefit payments during 2013	(94,018)
d. Interest at 7.75% to December 31, 2013	131,872
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,786,437
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.)*	1,786,437
2. Actuarial accrued liability at December 31, 2013	1,627,567
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	158,870
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,333,888
b. Contributions for 2013[1]	15,196
c. Benefit payments and expenses during 2013	(94,769)
d. Interest at 7.75% to December 31, 2013	100,293
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,354,608
5. Actuarial value of assets at December 31, 2013	1,474,051
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	119,443
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$278,313**

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	**$390,460**
2. Expected increase	41,369
3. Liability (gain)/loss	(158,870)
4. Asset (gain)/loss	(119,443)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$153,516**

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	7,683	56,169	13.68%	7,840	56,374	13.91%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	16,655	124,784	13.35%	16,395	125,936	13.02%
Total	**$24,338**	**$180,953**	**13.45%**	**$24,235**	**$182,310**	**13.29%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$153,516	$390,460
2. Next year's Tier 1/Tier 2 UAL payment	11,111	28,261
3. Combined valuation payroll	309,521	314,703
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.59%	8.98%

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	13.45%	13.29%
b. Tier 1/Tier 2 UAL rate	3.59%	8.98%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	17.19%	22.40%

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	10.14%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.14%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.03%
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%)*	7.14%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.14%
7. July 1, 2015 total pension rate, before adjustment	17.19%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(4.05%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.59%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.46%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.14%
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	13.45%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.45%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.14%

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	13.45%	13.29%
b. Tier 1/Tier 2 UAL rate	(0.46%)	(0.28%)
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%)*	13.14%	13.14%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$56,169	$0	$56,169
Tier 2	124,784	0	124,784
Tier 1/Tier 2 valuation payroll	180,953	0	180,953
OPSRP valuation payroll	128,568	0	128,568
Combined valuation payroll	**$309,521**	**$0**	**$309,521**

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	3	4	8	1	3	4	8
Police & Fire	0	0	0	0	0	0	0	0
Total	1	3	4	8	1	3	4	8
Active Members with previous service segments with the employer								
General Service	3	5	N/A	8	1	5	N/A	6
Police & Fire	1	0	N/A	1	1	0	N/A	1
Total	4	5	N/A	9	2	5	N/A	7
Dormant Members								
General Service	1	1	2	4	2	1	1	4
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	2	4	2	1	1	4
Retired Members and Beneficiaries								
General Service	13	1	0	14	12	1	0	13
Police & Fire	7	0	0	7	8	0	0	8
Total	20	1	0	21	20	1	0	21
Grand Total Number of Members	**26**	**10**	**6**	**42**	**25**	**10**	**5**	**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

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						2
60-64				1						1
65-69			1							1
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		
40-44		
45-49		
50-54		
55-59	2	237
60-64		
65-69		
70-74		
75+		
Total	2	237

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	95
45-49		
50-54		
55-59		
60-64	5	144
65-69	1	329
70-74	4	475
75-79	5	457
80-84	4	762
85-89		
90-94	1	236
95-99		
100+		
Total	21	410

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

City of Chiloquin/2186
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
City of Chiloquin/2186

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
City of Chiloquin/2186

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

City of Chiloquin -- #2186

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Chiloquin 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 City of Chiloquin.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Chiloquin

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.99%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(3.17%)	(3.17%)	(3.17%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.43%**	**4.77%**	**8.88%**
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	**10.96%**	**5.22%**	**9.33%**

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	9.82%	9.82%
Minimum July 1, 2017 Rate	6.82%	3.82%
Maximum July 1, 2017 Rate	12.82%	15.82%

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	$217,305	$164,346	($52,959)	132%	$132,882	(40%)
12/31/2009	251,498	176,052	(75,446)	143%	128,619	(59%)
12/31/2010	271,863	197,519	(74,344)	138%	149,992	(50%)
12/31/2011	269,067	209,321	(59,746)	129%	131,874	(45%)
12/31/2012	301,930	247,577	(54,353)	122%	173,359	(31%)
12/31/2013	338,970	260,327	(78,643)	130%	176,570	(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.

City of Chiloquin

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	($78,643)	($54,353)
Allocated pooled OPSRP UAL	12,485	12,219
Side account	0	0
Net unfunded pension actuarial accrued liability	(66,158)	(42,134)
Combined valuation payroll	176,570	173,359
Net pension UAL as a percentage of payroll	(37%)	(24%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,444	$3,637

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	$6,119	$6,044
Tier 1/Tier 2 valuation payroll	47,108	48,340
Tier 1/Tier 2 pension normal cost rate	12.99%	12.50%
Tier 1/ Tier 2 Actuarial accrued liability	$260,327	$247,577
Actuarial asset value	338,970	301,930
Tier 1/Tier 2 Unfunded actuarial accrued liability	(78,643)	(54,353)
Tier 1/ Tier 2 Funded status	130%	122%
Combined valuation payroll	$176,570	$173,359
Tier 1/Tier 2 UAL as a percentage of payroll	(45%)	(31%)
Tier 1/Tier 2 UAL rate	(3.17%)	(2.68%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	1	1
Tier 1/Tier 2 retirees and beneficiaries	1	1

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

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
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	176,570	173,359
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]	$38,875	$33,699
2. Employer reserves	250,484	220,542
3. Benefits in force reserve	49,612	47,689
4. Total market value of assets ***(1. + 2. + 3.)***	**$338,970**	**$301,930**

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	$301,930
2. Regular employer contributions	(3,681)
3. Benefit payments and expense	(7,680)
4. Adjustments[2]	2,974
5. Interest credited	45,428
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$338,970**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	$0	$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	6,119	6,044
Total	**$6,119**	**$6,044**

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	$6,119	$6,119	$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	170,720	158,237
▪ **Total Active Members**	**$170,720**	**$158,237**
Dormant Members	9,634	8,977
Retired Members and Beneficiaries	79,973	80,363
Total Actuarial Accrued Liability	**$260,327**	**$247,577**

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	$260,327	$260,327	$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	$260,327	$247,577
2. Actuarial value of assets	338,970	301,930
3. Unfunded accrued liability *(1. – 2.)*	(78,643)	(54,353)
4. Funded percentage *(2. ÷ 1.)*	130%	122%
5. Combined valuation payroll	$176,570	$173,359
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(45%)	(31%)

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	($78,643)	($5,692)
Total				**($78,643)**	**($5,692)**

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	$247,577
b. Normal cost at December 31, 2012	6,044
c. Benefit payments during 2013	(7,619)
d. Interest at 7.75% to December 31, 2013	19,360
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	265,362
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.)*	265,362
2. Actuarial accrued liability at December 31, 2013	260,327
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	5,035
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	301,930
b. Contributions for 2013[1]	(3,681)
c. Benefit payments and expenses during 2013	(7,680)
d. Interest at 7.75% to December 31, 2013	22,959
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	313,528
5. Actuarial value of assets at December 31, 2013	338,970
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	25,443
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$30,478**

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	**($54,353)**
2. Expected increase	6,188
3. Liability (gain)/loss	(5,035)
4. Asset (gain)/loss	(25,443)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($78,643)**

[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	6,119	47,108	12.99%	6,044	48,340	12.50%
Total	**$6,119**	**$47,108**	**12.99%**	**$6,044**	**$48,340**	**12.50%**

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	($78,643)	($54,353)
2. Next year's Tier 1/Tier 2 UAL payment	(5,692)	(3,934)
3. Combined valuation payroll	176,570	173,359
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(3.22%)	(2.27%)

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	12.99%	12.50%
b. Tier 1/Tier 2 UAL rate	(3.22%)	(2.27%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.92%	10.36%

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	6.82%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	6.82%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.36%
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%)*	3.82%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	9.82%
7. July 1, 2015 total pension rate, before adjustment	9.92%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.10%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.22%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.32%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.82%
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	12.99%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.99%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.82%

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	12.99%	12.50%
b. Tier 1/Tier 2 UAL rate	(3.32%)	(2.81%)
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%)*	9.82%	9.82%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	47,108	0	47,108
Tier 1/Tier 2 valuation payroll	47,108	0	47,108
OPSRP valuation payroll	129,462	0	129,462
Combined valuation payroll	**$176,570**	**$0**	**$176,570**

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	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	1	2
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	0	1	1	0	1	2
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**	**2**	**3**	**7**	**2**	**2**	**4**	**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	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	1	67
65-69		
70-74		
75+		
Total	1	67

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69	1	699
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	699

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

City of Clatskanie/2162
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
City of Clatskanie/2162

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

City of Clatskanie -- #2162

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Clatskanie 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 City of Clatskanie.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Clatskanie

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.65%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	1.01%	1.01%	1.01%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**15.27%**	**8.95%**	**13.06%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**15.80%**	**9.40%**	**13.51%**

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

1 *Includes Multnomah Fire District #10 rate.*

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 87%.

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

Executive Summary

Accounting Information

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

Pension

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

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	$5,738,465	$7,061,587	$1,323,122	81%	$754,261	175%
12/31/2009	6,704,003	7,633,373	929,370	88%	964,009	96%
12/31/2010	6,665,662	7,626,631	960,969	87%	987,654	97%
12/31/2011	6,731,192	8,033,650	1,302,458	84%	1,019,475	128%
12/31/2012	7,442,100	7,822,198	380,098	95%	872,808	44%
12/31/2013	6,150,130	7,105,945	955,815	87%	814,163	117%

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.

City of Clatskanie

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$955,815	$380,098
Allocated pooled OPSRP UAL	57,566	61,518
Side account	0	0
Net unfunded pension actuarial accrued liability	1,013,381	441,616
Combined valuation payroll	814,163	872,808
Net pension UAL as a percentage of payroll	124%	51%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$11,269	$18,312

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	$45,777	$121,901
Tier 1/Tier 2 valuation payroll	335,323	587,440
Tier 1/Tier 2 pension normal cost rate	13.65%	20.75%
Tier 1/ Tier 2 Actuarial accrued liability	$7,105,945	$7,822,198
Actuarial asset value	6,150,130	7,442,100
Tier 1/Tier 2 Unfunded actuarial accrued liability	955,815	380,098
Tier 1/ Tier 2 Funded status	87%	95%
Combined valuation payroll	$814,163	$872,808
Tier 1/Tier 2 UAL as a percentage of payroll	117%	44%
Tier 1/Tier 2 UAL rate	1.01%	(6.09%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	5	9
Tier 1/Tier 2 dormant members	1	2
Tier 1/Tier 2 retirees and beneficiaries	24	20

[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	814,163	872,808
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]	$391,891	$1,861,953
2. Employer reserves	2,122,748	3,336,354
3. Benefits in force reserve	3,635,492	2,243,792
4. Total market value of assets ***(1. + 2. + 3.)***	**$6,150,130**	**$7,442,100**

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	$7,442,100
2. Regular employer contributions	55,394
3. Benefit payments and expense	(562,789)
4. Adjustments [2]	(1,633,224)
5. Interest credited	848,650
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$6,150,130**

[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	$12,830
Tier 1 General Service	14,928	81,289
Tier 2 Police & Fire	12,555	11,892
Tier 2 General Service	18,294	15,890
Total	**$45,777**	**$121,901**

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	$45,777	$45,777	$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	$230,425	$502,276
▪ Tier 1 General Service	610,976	2,901,274
▪ Tier 2 Police & Fire	236,882	206,576
▪ Tier 2 General Service	167,377	141,134
▪ **Total Active Members**	**$1,245,660**	**$3,751,260**
Dormant Members	0	289,838
Retired Members and Beneficiaries	5,860,285	3,781,100
Total Actuarial Accrued Liability	**$7,105,945**	**$7,822,198**

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	$7,105,945	$7,105,945	$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	$7,105,945	$7,822,198
2. Actuarial value of assets	6,150,130	7,442,100
3. Unfunded accrued liability *(1. – 2.)*	955,815	380,098
4. Funded percentage *(2. ÷ 1.)*	87%	95%
5. Combined valuation payroll	$814,163	$872,808
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	117%	44%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$955,815	$69,182
Total				**$955,815**	**$69,182**

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	$7,822,198
b. Normal cost at December 31, 2012	121,901
c. Benefit payments during 2013	(558,326)
d. Interest at 7.75% to December 31, 2013	594,033
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	7,979,806
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.)*	7,979,806
2. Actuarial accrued liability at December 31, 2013	7,105,945
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	873,861
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	7,442,100
b. Contributions for 2013[1]	55,394
c. Benefit payments and expenses during 2013	(562,789)
d. Interest at 7.75% to December 31, 2013	557,101
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	7,491,805
5. Actuarial value of assets at December 31, 2013	6,150,130
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	(1,341,675)
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($467,814)**

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	**$380,098**
2. Expected increase	107,903
3. Liability (gain)/loss	(873,861)
4. Asset (gain)/loss	1,341,675
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$955,815**

[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%	$12,830	$66,579	19.27%
Tier 1 General Service	14,928	103,356	14.44%	81,289	312,971	25.97%
Tier 2 Police & Fire	12,555	78,673	15.96%	11,892	75,052	15.85%
Tier 2 General Service	18,294	153,294	11.93%	15,890	132,838	11.96%
Total	**$45,777**	**$335,323**	**13.65%**	**$121,901**	**$587,440**	**20.75%**

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	$955,815	$380,098
2. Next year's Tier 1/Tier 2 UAL payment	69,182	27,511
3. Combined valuation payroll	814,163	872,808
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	8.50%	3.15%

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	13.65%	20.75%
b. Tier 1/Tier 2 UAL rate	8.50%	3.15%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	22.30%	24.03%

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	11.66%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	11.66%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.33%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	87%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	8.66%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	14.66%
7. July 1, 2015 total pension rate, before adjustment	22.30%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(7.64%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	8.50%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.86%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	14.66%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	13.65%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.65%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	14.66%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	**Advisory July 1, 2015 Rates calculated as of December 31, 2012**
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.65%	20.75%
b. Tier 1/Tier 2 UAL rate	0.86%	(6.22%)
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%)*	14.66%	14.66%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$103,356	$0	$103,356
Tier 2	153,294	78,673	231,967
Tier 1/Tier 2 valuation payroll	256,650	78,673	335,323
OPSRP valuation payroll	328,162	150,678	478,840
Combined valuation payroll	**$584,812**	**$229,351**	**$814,163**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	2	2	6	10	5	2	3	10
Police & Fire	0	1	2	3	1	1	2	4
Total	2	3	8	13	6	3	5	14
Active Members with previous service segments with the employer								
General Service	2	1	N/A	3	1	0	N/A	1
Police & Fire	5	0	N/A	5	5	0	N/A	5
Total	7	1	N/A	8	6	0	N/A	6
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	1	0	0	1	2	0	0	2
Total	1	0	0	1	2	0	0	2
Retired Members and Beneficiaries								
General Service	15	0	0	15	13	0	0	13
Police & Fire	8	1	0	9	6	1	0	7
Total	23	1	0	24	19	1	0	20
Grand Total Number of Members	**33**	**5**	**8**	**46**	**33**	**4**	**5**	**42**

[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				1						**1**
45-49			1							**1**
50-54										
55-59				2						**2**
60-64			1							**1**
65-69										
70-74										
75+										
Total	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**5**

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	0
50-54		
55-59		
60-64		
65-69		
70-74		
75+		
Total	1	0

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	2,760
45-49	1	109
50-54	1	2,691
55-59	4	2,816
60-64	2	1,329
65-69	7	2,240
70-74	2	135
75-79	1	609
80-84	2	943
85-89		
90-94	2	710
95-99	1	75
100+		
Total	24	1,643

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

City of Coos Bay/2152
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
City of Coos Bay/2152

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

City of Coos Bay -- #2152

September 2014

Secondary Employers

2190 City Of Eastside

CONTENTS

Executive Summary

Milliman has prepared this report for City of Coos Bay 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 City of Coos Bay.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Coos Bay

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.55%	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	**16.58%**	**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	**17.11%**	**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 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	15.97%	15.97%
Minimum July 1, 2017 Rate	12.78%	9.59%
Maximum July 1, 2017 Rate	19.16%	22.35%

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	$29,981,209	$37,359,256	$7,378,047	80%	$5,072,888	145%
12/31/2009	33,985,858	38,913,223	4,927,365	87%	5,474,299	90%
12/31/2010	35,757,840	40,041,572	4,283,732	89%	5,849,235	73%
12/31/2011	35,279,915	42,431,747	7,151,832	83%	6,136,958	117%
12/31/2012	39,127,841	43,090,689	3,962,848	91%	6,598,945	60%
12/31/2013	41,335,740	45,297,166	3,961,426	91%	6,468,089	61%

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.

City of Coos Bay

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$3,961,426	$3,962,848
Allocated pooled OPSRP UAL	457,333	465,112
Side account	0	0
Net unfunded pension actuarial accrued liability	4,418,759	4,427,960
Combined valuation payroll	6,468,089	6,598,945
Net pension UAL as a percentage of payroll	68%	67%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$89,525	$138,449

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	$635,904	$668,486
Tier 1/Tier 2 valuation payroll	4,088,689	4,309,422
Tier 1/Tier 2 pension normal cost rate	15.55%	15.51%
Tier 1/ Tier 2 Actuarial accrued liability	$45,297,166	$43,090,689
Actuarial asset value	41,335,740	39,127,841
Tier 1/Tier 2 Unfunded actuarial accrued liability	3,961,426	3,962,848
Tier 1/ Tier 2 Funded status	91%	91%
Combined valuation payroll	$6,468,089	$6,598,945
Tier 1/Tier 2 UAL as a percentage of payroll	61%	60%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	0.42%	0.46%
Tier 1/Tier 2 active members [1]	50	57
Tier 1/Tier 2 dormant members	19	20
Tier 1/Tier 2 retirees and beneficiaries	122	106

[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	6,468,089	6,598,945
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]	$5,255,182	$6,988,136
2. Employer reserves	19,865,091	19,346,711
3. Benefits in force reserve	16,215,466	12,792,994
4. Total market value of assets *(1. + 2. + 3.)*	**$41,335,740**	**$39,127,841**

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	$39,127,841
2.	Regular employer contributions	568,297
3.	Benefit payments and expense	(2,510,222)
4.	Adjustments[2]	(1,324,346)
5.	Interest credited	5,474,169
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$41,335,740**

[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	$199,288	$186,729
Tier 1 General Service	119,975	166,460
Tier 2 Police & Fire	261,837	251,816
Tier 2 General Service	54,804	63,481
Total	**$635,904**	**$668,486**

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	$635,904	$635,904	$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	$6,952,651	$6,954,778
▪ Tier 1 General Service	4,317,646	5,712,435
▪ Tier 2 Police & Fire	4,452,313	3,897,371
▪ Tier 2 General Service	784,883	785,966
▪ **Total Active Members**	**$16,507,493**	**$17,350,550**
Dormant Members	2,650,911	4,182,177
Retired Members and Beneficiaries	26,138,762	21,557,962
Total Actuarial Accrued Liability	**$45,297,166**	**$43,090,689**

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	$45,297,166	$45,297,166	$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	$45,297,166	$43,090,689
2. Actuarial value of assets	41,335,740	39,127,841
3. Unfunded accrued liability *(1. – 2.)*	3,961,426	3,962,848
4. Funded percentage *(2. ÷ 1.)*	91%	91%
5. Combined valuation payroll	$6,468,089	$6,598,945
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	61%	60%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$3,961,426	$286,727
Total				**$3,961,426**	**$286,727**

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	$43,090,689
b. Normal cost at December 31, 2012	668,486
c. Benefit payments during 2013	(2,490,312)
d. Interest at 7.75% to December 31, 2013	3,294,836
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	44,563,699
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.)*	44,563,699
2. Actuarial accrued liability at December 31, 2013	45,297,166
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(733,467)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	39,127,841
b. Contributions for 2013[1]	568,297
c. Benefit payments and expenses during 2013	(2,510,222)
d. Interest at 7.75% to December 31, 2013	2,957,158
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	40,143,074
5. Actuarial value of assets at December 31, 2013	41,335,740
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	1,192,665
7. Total actuarial gain/(loss) *(3. + 6.)*	**$459,198**

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	**$3,962,848**
2. Expected increase	457,776
3. Liability (gain)/loss	733,467
4. Asset (gain)/loss	(1,192,665)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$3,961,426**

[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	$199,288	$1,165,815	17.09%	$186,729	$1,096,631	17.03%
Tier 1 General Service	119,975	775,630	15.47%	166,460	1,058,182	15.73%
Tier 2 Police & Fire	261,837	1,662,375	15.75%	251,816	1,605,711	15.68%
Tier 2 General Service	54,804	484,869	11.30%	63,481	548,898	11.57%
Total	**$635,904**	**$4,088,689**	**15.55%**	**$668,486**	**$4,309,422**	**15.51%**

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	$3,961,426	$3,962,848
2. Next year's Tier 1/Tier 2 UAL payment	286,727	286,830
3. Combined valuation payroll	6,468,089	6,598,945
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	4.43%	4.35%

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	15.55%	15.51%
b. Tier 1/Tier 2 UAL rate	4.43%	4.35%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	20.13%	19.99%

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	12.97%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	12.97%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.59%
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%)*	9.97%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	15.97%
7. July 1, 2015 total pension rate, before adjustment	20.13%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(4.16%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	4.43%
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	15.97%
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	15.55%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.55%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	15.97%

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	15.55%	15.51%
b. Tier 1/Tier 2 UAL rate	0.27%	0.33%
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%)*	15.97%	15.97%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$775,630	$1,165,815	$1,941,445
Tier 2	484,869	1,662,375	2,147,244
Tier 1/Tier 2 valuation payroll	1,260,499	2,828,190	4,088,689
OPSRP valuation payroll	1,376,494	1,002,906	2,379,400
Combined valuation payroll	**$2,636,993**	**$3,831,096**	**$6,468,089**

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	8	23	44	18	10	23	51
Police & Fire	11	18	12	41	11	18	12	41
Total	24	26	35	85	29	28	35	92
Active Members with previous service segments with the employer								
General Service	18	3	N/A	21	10	3	N/A	13
Police & Fire	15	2	N/A	17	14	0	N/A	14
Total	33	5	N/A	38	24	3	N/A	27
Dormant Members								
General Service	7	5	6	18	9	4	3	16
Police & Fire	7	0	2	9	7	0	1	8
Total	14	5	8	27	16	4	4	24
Retired Members and Beneficiaries								
General Service	69	7	0	76	56	8	0	64
Police & Fire	46	0	0	46	42	0	0	42
Total	115	7	0	122	98	8	0	106
Grand Total Number of Members	**186**	**43**	**43**	**272**	**167**	**43**	**39**	**249**

[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			2							**2**
35-39			1	1						**2**
40-44			6	5	1					**12**
45-49			3	4	4	3				**14**
50-54			1	2	4	2				**9**
55-59			2		2	3				**7**
60-64			1	1	1					**3**
65-69			1							**1**
70-74										
75+										
Total	**0**	**0**	**17**	**13**	**12**	**8**	**0**	**0**	**0**	**50**

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	2,264
45-49	5	1,574
50-54	5	1,770
55-59	4	940
60-64	3	852
65-69		
70-74	1	50
75+		
Total	19	1,334

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	2	458
45-49	1	2,282
50-54		
55-59	16	2,040
60-64	26	1,214
65-69	31	1,899
70-74	21	1,307
75-79	16	1,505
80-84	7	878
85-89	1	257
90-94		
95-99	1	154
100+		
Total	122	1,511

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

City of Cornelius/2165
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
City of Cornelius/2165

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

City of Cornelius -- #2165

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Cornelius 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 City of Cornelius.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Cornelius

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.62%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.97%)	(0.97%)	(0.97%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.26%**	**6.97%**	**11.08%**
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	**12.79%**	**7.42%**	**11.53%**

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

1 *Includes Multnomah Fire District #10 rate.*

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 103%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	11.65%	11.65%
Minimum July 1, 2017 Rate	8.65%	5.65%
Maximum July 1, 2017 Rate	14.65%	17.65%

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	$10,417,104	$11,776,605	$1,359,501	88%	$3,108,035	44%
12/31/2009	12,174,164	12,344,876	170,712	99%	3,230,582	5%
12/31/2010	12,910,986	13,544,596	633,610	95%	3,185,343	20%
12/31/2011	12,741,384	14,273,829	1,532,445	89%	3,159,772	49%
12/31/2012	14,125,865	14,240,263	114,398	99%	3,158,935	4%
12/31/2013	15,582,414	15,109,557	(472,857)	103%	3,177,105	(15%)

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.

City of Cornelius

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($472,857)	$114,398
Allocated pooled OPSRP UAL	224,641	222,650
Side account	0	0
Net unfunded pension actuarial accrued liability	(248,216)	337,048
Combined valuation payroll	3,177,105	3,158,935
Net pension UAL as a percentage of payroll	(8%)	11%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$43,975	$66,276

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	$242,242	$258,555
Tier 1/Tier 2 valuation payroll	1,919,162	1,996,792
Tier 1/Tier 2 pension normal cost rate	12.62%	12.95%
Tier 1/ Tier 2 Actuarial accrued liability	$15,109,557	$14,240,263
Actuarial asset value	15,582,414	14,125,865
Tier 1/Tier 2 Unfunded actuarial accrued liability	(472,857)	114,398
Tier 1/ Tier 2 Funded status	103%	99%
Combined valuation payroll	$3,177,105	$3,158,935
Tier 1/Tier 2 UAL as a percentage of payroll	(15%)	4%
Tier 1/Tier 2 UAL rate	(0.97%)	(1.30%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	25	27
Tier 1/Tier 2 dormant members	13	18
Tier 1/Tier 2 retirees and beneficiaries	37	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	3,177,105	3,158,935
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]	$2,711,267	$2,680,287
2. Employer reserves	8,346,911	7,728,639
3. Benefits in force reserve	4,524,236	3,716,939
4. Total market value of assets ***(1. + 2. + 3.)***	**$15,582,414**	**$14,125,865**

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	$14,125,865
2. Regular employer contributions	162,959
3. Benefit payments and expense	(700,371)
4. Adjustments[2]	(21,489)
5. Interest credited	2,015,449
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$15,582,414**

[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	$47,279	$60,402
Tier 1 General Service	87,480	83,875
Tier 2 Police & Fire	37,792	49,125
Tier 2 General Service	69,691	65,153
Total	**$242,242**	**$258,555**

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	$242,242	$242,242	$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	$1,834,865	$2,198,208
▪ Tier 1 General Service	2,691,149	2,439,928
▪ Tier 2 Police & Fire	850,100	750,020
▪ Tier 2 General Service	1,616,311	1,430,940
▪ **Total Active Members**	**$6,992,425**	**$6,819,096**
Dormant Members	824,222	1,157,612
Retired Members and Beneficiaries	7,292,910	6,263,555
Total Actuarial Accrued Liability	**$15,109,557**	**$14,240,263**

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	$15,109,557	$15,109,557	$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	$15,109,557	$14,240,263
2. Actuarial value of assets	15,582,414	14,125,865
3. Unfunded accrued liability *(1. – 2.)*	(472,857)	114,398
4. Funded percentage *(2. ÷ 1.)*	103%	99%
5. Combined valuation payroll	$3,177,105	$3,158,935
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(15%)	4%

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	($472,857)	($34,225)
Total				**($472,857)**	**($34,225)**

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	$14,240,263
b. Normal cost at December 31, 2012	258,555
c. Benefit payments during 2013	(694,816)
d. Interest at 7.75% to December 31, 2013	1,096,734
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	14,900,736
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.)*	14,900,736
2. Actuarial accrued liability at December 31, 2013	15,109,557
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(208,821)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	14,125,865
b. Contributions for 2013[1]	162,959
c. Benefit payments and expenses during 2013	(700,371)
d. Interest at 7.75% to December 31, 2013	1,073,930
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	14,662,383
5. Actuarial value of assets at December 31, 2013	15,582,414
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	920,030
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$711,209**

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	**$114,398**
2. Expected increase	123,954
3. Liability (gain)/loss	208,821
4. Asset (gain)/loss	(920,030)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($472,857)**

[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	$47,279	$295,871	15.98%	$60,402	$386,675	15.62%
Tier 1 General Service	87,480	697,001	12.55%	83,875	663,468	12.64%
Tier 2 Police & Fire	37,792	270,155	13.99%	49,125	333,210	14.74%
Tier 2 General Service	69,691	656,135	10.62%	65,153	613,439	10.62%
Total	**$242,242**	**$1,919,162**	**12.62%**	**$258,555**	**$1,996,792**	**12.95%**

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	($472,857)	$114,398
2. Next year's Tier 1/Tier 2 UAL payment	(34,225)	8,280
3. Combined valuation payroll	3,177,105	3,158,935
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(1.08%)	0.26%

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	12.62%	12.95%
b. Tier 1/Tier 2 UAL rate	(1.08%)	0.26%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	11.69%	13.34%

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	8.65%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	8.65%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.73%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	103%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	5.65%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.65%
7. July 1, 2015 total pension rate, before adjustment	11.69%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.04%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(1.08%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(1.12%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.65%
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	12.62%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.62%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	11.65%

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	12.62%	12.95%
b. Tier 1/Tier 2 UAL rate	(1.12%)	(1.43%)
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%)*	11.65%	11.65%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$697,001	$295,871	$992,872
Tier 2	656,135	270,155	926,290
Tier 1/Tier 2 valuation payroll	1,353,136	566,026	1,919,162
OPSRP valuation payroll	625,049	632,894	1,257,943
Combined valuation payroll	**$1,978,185**	**$1,198,920**	**$3,177,105**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	9	10	12	31	9	10	13	32
Police & Fire	3	3	9	15	4	4	9	17
Total	12	13	21	46	13	14	22	49
Active Members with previous service segments with the employer								
General Service	7	11	N/A	18	5	6	N/A	11
Police & Fire	9	5	N/A	14	1	3	N/A	4
Total	16	16	N/A	32	6	9	N/A	15
Dormant Members								
General Service	6	5	0	11	9	7	0	16
Police & Fire	1	1	0	2	1	1	0	2
Total	7	6	0	13	10	8	0	18
Retired Members and Beneficiaries								
General Service	17	3	0	20	13	3	0	16
Police & Fire	17	0	0	17	13	1	0	14
Total	34	3	0	37	26	4	0	30
Grand Total Number of Members	**69**	**38**	**21**	**128**	**55**	**35**	**22**	**112**

[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			2							**2**
40-44			2	4						**6**
45-49			2	4	1					**7**
50-54				2						**2**
55-59			1		2	2				**5**
60-64			2							**2**
65-69				1						**1**
70-74										
75+										
Total	**0**	**0**	**9**	**11**	**3**	**2**	**0**	**0**	**0**	**25**

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	1	232
35-39	2	16
40-44	1	1,621
45-49		
50-54	2	221
55-59	4	463
60-64	3	1,082
65-69		
70-74		
75+		
Total	13	571

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	10	1,645
60-64	6	962
65-69	8	1,808
70-74	5	1,528
75-79	4	953
80-84	2	1,667
85-89	2	416
90-94		
95-99		
100+		
Total	37	1,414

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

City of Cottage Grove/2127
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
City of Cottage Grove/2127

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

City of Cottage Grove -- #2127

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Cottage Grove 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 City of Cottage Grove.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Cottage Grove

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.74%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.76%	0.76%	0.76%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**17.11%**	**8.70%**	**12.81%**
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	**17.64%**	**9.15%**	**13.26%**

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

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

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	16.50%	16.50%
Minimum July 1, 2017 Rate	13.20%	9.90%
Maximum July 1, 2017 Rate	19.80%	23.10%

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	$25,591,390	$31,631,437	$6,040,047	81%	$3,544,495	170%
12/31/2009	29,216,208	32,864,480	3,648,272	89%	3,747,512	97%
12/31/2010	31,425,921	34,333,400	2,907,479	92%	3,750,985	78%
12/31/2011	31,039,561	35,814,645	4,775,084	87%	3,832,180	125%
12/31/2012	34,036,351	35,941,947	1,905,596	95%	4,097,780	47%
12/31/2013	37,269,216	37,629,931	360,715	99%	4,087,108	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.

City of Cottage Grove

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$360,715	$1,905,596
Allocated pooled OPSRP UAL	288,983	288,823
Side account	0	0
Net unfunded pension actuarial accrued liability	649,698	2,194,419
Combined valuation payroll	4,087,108	4,097,780
Net pension UAL as a percentage of payroll	16%	54%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$56,570	$85,973

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	$422,816	$468,487
Tier 1/Tier 2 valuation payroll	2,686,861	2,862,091
Tier 1/Tier 2 pension normal cost rate	15.74%	16.37%
Tier 1/ Tier 2 Actuarial accrued liability	$37,629,931	$35,941,947
Actuarial asset value	37,269,216	34,036,351
Tier 1/Tier 2 Unfunded actuarial accrued liability	360,715	1,905,596
Tier 1/ Tier 2 Funded status	99%	95%
Combined valuation payroll	$4,087,108	$4,097,780
Tier 1/Tier 2 UAL as a percentage of payroll	9%	47%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	0.76%	0.13%
Tier 1/Tier 2 active members [1]	45	48
Tier 1/Tier 2 dormant members	24	24
Tier 1/Tier 2 retirees and beneficiaries	96	89

[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	4,087,108	4,097,780
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]	$6,110,611	$6,672,144
2. Employer reserves	18,297,233	16,614,895
3. Benefits in force reserve	12,861,372	10,749,312
4. Total market value of assets ***(1. + 2. + 3.)***	**$37,269,216**	**$34,036,351**

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	$34,036,351
2. Regular employer contributions	407,279
3. Benefit payments and expense	(1,990,994)
4. Adjustments[2]	(5,863)
5. Interest credited	4,822,443
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$37,269,216**

[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	$97,840	$135,648
Tier 1 General Service	201,005	214,429
Tier 2 Police & Fire	33,614	31,792
Tier 2 General Service	90,357	86,618
Total	**$422,816**	**$468,487**

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	$422,816	$422,816	$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	$5,491,749	$6,346,561
▪ Tier 1 General Service	5,778,549	6,252,793
▪ Tier 2 Police & Fire	684,714	639,490
▪ Tier 2 General Service	2,213,749	1,986,126
▪ **Total Active Members**	**$14,168,761**	**$15,224,970**
Dormant Members	2,729,090	2,602,901
Retired Members and Beneficiaries	20,732,080	18,114,076
Total Actuarial Accrued Liability	**$37,629,931**	**$35,941,947**

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	$37,629,931	$37,629,931	$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	$37,629,931	$35,941,947
2. Actuarial value of assets	37,269,216	34,036,351
3. Unfunded accrued liability *(1. – 2.)*	360,715	1,905,596
4. Funded percentage *(2. ÷ 1.)*	99%	95%
5. Combined valuation payroll	$4,087,108	$4,097,780
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	9%	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	$360,715	$26,108
Total				**$360,715**	**$26,108**

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	$35,941,947
b. Normal cost at December 31, 2012	468,487
c. Benefit payments during 2013	(1,975,202)
d. Interest at 7.75% to December 31, 2013	2,745,270
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	37,180,502
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.)*	37,180,502
2. Actuarial accrued liability at December 31, 2013	37,629,931
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(449,429)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	34,036,351
b. Contributions for 2013[1]	407,279
c. Benefit payments and expenses during 2013	(1,990,994)
d. Interest at 7.75% to December 31, 2013	2,576,448
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	35,029,085
5. Actuarial value of assets at December 31, 2013	37,269,216
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	2,240,131
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$1,790,702**

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	**$1,905,596**
2. Expected increase	245,821
3. Liability (gain)/loss	449,429
4. Asset (gain)/loss	(2,240,131)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$360,715**

[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	$97,840	$524,782	18.64%	$135,648	$672,596	20.17%
Tier 1 General Service	201,005	1,095,734	18.34%	214,429	1,162,287	18.45%
Tier 2 Police & Fire	33,614	225,829	14.88%	31,792	209,041	15.21%
Tier 2 General Service	90,357	840,516	10.75%	86,618	818,167	10.59%
Total	**$422,816**	**$2,686,861**	**15.74%**	**$468,487**	**$2,862,091**	**16.37%**

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	$360,715	$1,905,596
2. Next year's Tier 1/Tier 2 UAL payment	26,108	137,927
3. Combined valuation payroll	4,087,108	4,097,780
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.64%	3.37%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.74%	16.37%
b. Tier 1/Tier 2 UAL rate	0.64%	3.37%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	16.53%	19.87%

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	13.50%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.50%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.70%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	99%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	10.50%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	16.50%
7. July 1, 2015 total pension rate, before adjustment	16.53%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.03%)
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.)*	0.61%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	16.50%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	15.74%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.74%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	16.50%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.74%	16.37%
b. Tier 1/Tier 2 UAL rate	0.61%	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%)*	16.50%	16.50%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$1,095,734	$524,782	$1,620,516
Tier 2	840,516	225,829	1,066,345
Tier 1/Tier 2 valuation payroll	1,936,250	750,611	2,686,861
OPSRP valuation payroll	976,721	423,526	1,400,247
Combined valuation payroll	**$2,912,971**	**$1,174,137**	**$4,087,108**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	16	18	24	58	18	18	25	61
Police & Fire	8	3	6	17	9	3	4	16
Total	24	21	30	75	27	21	29	77
Active Members with previous service segments with the employer								
General Service	9	14	N/A	23	10	10	N/A	20
Police & Fire	13	7	N/A	20	9	6	N/A	15
Total	22	21	N/A	43	19	16	N/A	35
Dormant Members								
General Service	13	5	3	21	14	4	3	21
Police & Fire	4	2	0	6	4	2	0	6
Total	17	7	3	27	18	6	3	27
Retired Members and Beneficiaries								
General Service	50	0	0	50	42	4	0	46
Police & Fire	44	2	0	46	40	3	0	43
Total	94	2	0	96	82	7	0	89
Grand Total Number of Members	**157**	**51**	**33**	**241**	**146**	**50**	**32**	**228**

[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			2							**2**
35-39		1	1	1						**3**
40-44			3							**3**
45-49			2	2	2					**6**
50-54			3	1	1	2	1			**8**
55-59			3	1	1	1	1	1		**8**
60-64			2	3	1	1		1		**8**
65-69					1	2	2			**5**
70-74			1							**1**
75+			1							**1**
Total	**0**	**1**	**18**	**8**	**6**	**6**	**4**	**2**	**0**	**45**

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	143
30-34		
35-39		
40-44	5	1,033
45-49	4	1,004
50-54	2	1,595
55-59	8	1,113
60-64	3	1,351
65-69	1	379
70-74		
75+		
Total	24	1,077

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	73
45-49	2	1,593
50-54	3	2,289
55-59	14	2,590
60-64	21	1,320
65-69	27	1,280
70-74	11	1,908
75-79	9	870
80-84	3	1,308
85-89	4	961
90-94	1	41
95-99		
100+		
Total	96	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

City of Culver/2257
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
City of Culver/2257

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

City of Culver -- #2257

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Culver 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 City of Culver.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Culver

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.57%	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	**13.62%**	**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	**14.15%**	**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 87%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	13.01%	13.01%
Minimum July 1, 2017 Rate	10.01%	7.01%
Maximum July 1, 2017 Rate	16.01%	19.01%

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	$413,487	$564,527	$151,040	73%	$119,335	127%
12/31/2009	466,386	607,627	141,241	77%	99,352	142%
12/31/2010	502,571	642,042	139,471	78%	102,486	136%
12/31/2011	498,653	673,446	174,793	74%	108,081	162%
12/31/2012	563,057	653,919	90,862	86%	119,064	76%
12/31/2013	594,728	683,048	88,320	87%	107,541	82%

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.

City of Culver

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$88,320	$90,862
Allocated pooled OPSRP UAL	7,604	8,392
Side account	0	0
Net unfunded pension actuarial accrued liability	95,924	99,254
Combined valuation payroll	107,541	119,064
Net pension UAL as a percentage of payroll	89%	83%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,488	$2,498

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	$14,591	$13,813
Tier 1/Tier 2 valuation payroll	107,541	99,997
Tier 1/Tier 2 pension normal cost rate	13.57%	13.81%
Tier 1/ Tier 2 Actuarial accrued liability	$683,048	$653,919
Actuarial asset value	594,728	563,057
Tier 1/Tier 2 Unfunded actuarial accrued liability	88,320	90,862
Tier 1/ Tier 2 Funded status	87%	86%
Combined valuation payroll	$107,541	$119,064
Tier 1/Tier 2 UAL as a percentage of payroll	82%	76%
Tier 1/Tier 2 UAL rate	(0.56%)	(0.80%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	2	2
Tier 1/Tier 2 dormant members	2	3
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	107,541	119,064
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]	$105,541	$146,495
2. Employer reserves	241,597	253,585
3. Benefits in force reserve	247,591	162,977
4. Total market value of assets ***(1. + 2. + 3.)***	**$594,728**	**$563,057**

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	$563,057
2.	Regular employer contributions	10,887
3.	Benefit payments and expense	(38,328)
4.	Adjustments [2]	(17,111)
5.	Interest credited	76,224
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$594,728**

[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	14,591	13,813
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$14,591**	**$13,813**

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	$14,591	$14,591	$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	264,898	362,305
▪ Tier 2 Police & Fire	209	100
▪ Tier 2 General Service	30	14
▪ **Total Active Members**	**$265,137**	**$362,419**
Dormant Members	18,803	16,860
Retired Members and Beneficiaries	399,108	274,640
Total Actuarial Accrued Liability	**$683,048**	**$653,919**

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	$683,048	$683,048	$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	$683,048	$653,919
2. Actuarial value of assets	594,728	563,057
3. Unfunded accrued liability *(1. – 2.)*	88,320	90,862
4. Funded percentage *(2. ÷ 1.)*	87%	86%
5. Combined valuation payroll	$107,541	$119,064
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	82%	76%

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	$88,320	$6,393
Total				**$88,320**	**$6,393**

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	$653,919
b. Normal cost at December 31, 2012	13,813
c. Benefit payments during 2013	(38,024)
d. Interest at 7.75% to December 31, 2013	50,276
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	679,984
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.)*	679,984
2. Actuarial accrued liability at December 31, 2013	683,048
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(3,064)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	563,057
b. Contributions for 2013[1]	10,887
c. Benefit payments and expenses during 2013	(38,328)
d. Interest at 7.75% to December 31, 2013	42,574
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	578,189
5. Actuarial value of assets at December 31, 2013	594,728
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	16,539
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$13,475**

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	**$90,862**
2. Expected increase	10,933
3. Liability (gain)/loss	3,064
4. Asset (gain)/loss	(16,539)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$88,320**

[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	14,591	107,541	13.57%	13,813	99,997	13.81%
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	**$14,591**	**$107,541**	**13.57%**	**$13,813**	**$99,997**	**13.81%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$88,320	$90,862
2. Next year's Tier 1/Tier 2 UAL payment	6,393	6,577
3. Combined valuation payroll	107,541	119,064
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	5.94%	5.52%

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	13.57%	13.81%
b. Tier 1/Tier 2 UAL rate	5.94%	5.52%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	19.66%	19.46%

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	10.01%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.01%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.00%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	87%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	7.01%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.01%
7. July 1, 2015 total pension rate, before adjustment	19.66%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(6.65%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	5.94%
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	13.01%
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	13.57%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.57%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.01%

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	13.57%	13.81%
b. Tier 1/Tier 2 UAL rate	(0.71%)	(0.93%)
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%)*	13.01%	13.01%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$107,541	$0	$107,541
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	107,541	0	107,541
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$107,541**	**$0**	**$107,541**

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	0	2	2	0	1	3
Police & Fire	0	0	0	0	0	0	0	0
Total	2	0	0	2	2	0	1	3
Active Members with previous service segments with the employer								
General Service	2	1	N/A	3	1	1	N/A	2
Police & Fire	0	1	N/A	1	0	1	N/A	1
Total	2	2	N/A	4	1	2	N/A	3
Dormant Members								
General Service	1	1	2	4	1	2	1	4
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	2	4	1	2	1	4
Retired Members and Beneficiaries								
General Service	4	0	0	4	3	0	0	3
Police & Fire	1	1	0	2	1	1	0	2
Total	5	1	0	6	4	1	0	5
Grand Total Number of Members	**10**	**4**	**2**	**16**	**8**	**5**	**2**	**15**

[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										
70-74										
75+										
Total	**0**	**0**	**0**	**0**	**2**	**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	339
50-54		
55-59	1	17
60-64		
65-69		
70-74		
75+		
Total	2	178

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	774
60-64	2	413
65-69	1	3
70-74	1	1,183
75-79	1	216
80-84		
85-89		
90-94		
95-99		
100+		
Total	6	501

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

City of Dufur/2262
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
City of Dufur/2262

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
City of Dufur/2262

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

City of Dufur -- #2262

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Dufur 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 City of Dufur.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Dufur

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.99%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	2.36%	2.36%	2.36%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**15.96%**	**10.30%**	**14.41%**
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	**16.49%**	**10.75%**	**14.86%**

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 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	15.35%	15.35%
Minimum July 1, 2017 Rate	12.28%	9.21%
Maximum July 1, 2017 Rate	18.42%	21.49%

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	$511,116	$683,432	$172,316	75%	$90,910	190%
12/31/2009	586,795	697,077	110,282	84%	89,502	123%
12/31/2010	592,439	715,139	122,700	83%	62,947	195%
12/31/2011	572,637	733,287	160,650	78%	91,905	175%
12/31/2012	629,723	718,190	88,467	88%	102,070	87%
12/31/2013	699,914	733,118	33,204	95%	108,602	31%

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.

City of Dufur

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$33,204	$88,467
Allocated pooled OPSRP UAL	7,679	7,194
Side account	0	0
Net unfunded pension actuarial accrued liability	40,883	95,661
Combined valuation payroll	108,602	102,070
Net pension UAL as a percentage of payroll	38%	94%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,503	$2,141

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	$6,068	$5,731
Tier 1/Tier 2 valuation payroll	46,713	45,245
Tier 1/Tier 2 pension normal cost rate	12.99%	12.67%
Tier 1/ Tier 2 Actuarial accrued liability	$733,118	$718,190
Actuarial asset value	699,914	629,723
Tier 1/Tier 2 Unfunded actuarial accrued liability	33,204	88,467
Tier 1/ Tier 2 Funded status	95%	88%
Combined valuation payroll	$108,602	$102,070
Tier 1/Tier 2 UAL as a percentage of payroll	31%	87%
Tier 1/Tier 2 UAL rate	2.36%	5.07%
(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	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	108,602	102,070
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]	$42,369	$36,830
2. Employer reserves	290,905	241,600
3. Benefits in force reserve	366,639	351,293
4. Total market value of assets ***(1. + 2. + 3.)***	**$699,914**	**$629,723**

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	$629,723
2.	Regular employer contributions	10,153
3.	Benefit payments and expense	(56,757)
4.	Adjustments [2]	22,930
5.	Interest credited	93,865
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$699,914**

[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	6,068	5,731
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$6,068**	**$5,731**

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	$6,068	$6,068	$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	142,109	126,213
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$142,109**	**$126,213**
Dormant Members	0	0
Retired Members and Beneficiaries	591,009	591,977
Total Actuarial Accrued Liability	**$733,118**	**$718,190**

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	$733,118	$733,118	$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

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

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	$733,118	$718,190
2. Actuarial value of assets	699,914	629,723
3. Unfunded accrued liability *(1. – 2.)*	33,204	88,467
4. Funded percentage *(2. ÷ 1.)*	95%	88%
5. Combined valuation payroll	$108,602	$102,070
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	31%	87%

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	$33,204	$2,403
Total				**$33,204**	**$2,403**

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	$718,190
b. Normal cost at December 31, 2012	5,731
c. Benefit payments during 2013	(56,307)
d. Interest at 7.75% to December 31, 2013	53,922
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	721,536
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.)*	721,536
2. Actuarial accrued liability at December 31, 2013	733,118
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(11,582)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	629,723
b. Contributions for 2013[1]	10,153
c. Benefit payments and expenses during 2013	(56,757)
d. Interest at 7.75% to December 31, 2013	46,998
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	630,117
5. Actuarial value of assets at December 31, 2013	699,914
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	69,797
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$58,215**

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	**$88,467**
2. Expected increase	2,952
3. Liability (gain)/loss	11,582
4. Asset (gain)/loss	(69,797)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$33,204**

[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	6,068	46,713	12.99%	5,731	45,245	12.67%
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	**$6,068**	**$46,713**	**12.99%**	**$5,731**	**$45,245**	**12.67%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$33,204	$88,467
2. Next year's Tier 1/Tier 2 UAL payment	2,403	6,403
3. Combined valuation payroll	108,602	102,070
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.21%	6.27%

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	12.99%	12.67%
b. Tier 1/Tier 2 UAL rate	2.21%	6.27%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.35%	19.07%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

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

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

1. Current net Tier 1/Tier 2 pension contribution rate	14.74%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	14.74%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.95%
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%)*	11.74%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	17.74%
7. July 1, 2015 total pension rate, before adjustment	15.35%
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	2.21%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	2.21%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	15.35%
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	12.99%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.99%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	15.35%

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	12.99%	12.67%
b. Tier 1/Tier 2 UAL rate	2.21%	4.94%
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%)*	15.35%	17.74%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$46,713	$0	$46,713
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	46,713	0	46,713
OPSRP valuation payroll	61,889	0	61,889
Combined valuation payroll	**$108,602**	**$0**	**$108,602**

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	2	3
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	2	3	1	0	2	3
Active Members with previous service segments with the employer								
General Service	1	0	N/A	1	1	0	N/A	1
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	1	0	N/A	1	1	0	N/A	1
Dormant Members								
General Service	0	0	1	1	0	0	1	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	1	1
Retired Members and Beneficiaries								
General Service	4	0	0	4	4	0	0	4
Police & Fire	1	0	0	1	1	0	0	1
Total	5	0	0	5	5	0	0	5
Grand Total Number of Members	**7**	**0**	**3**	**10**	**7**	**0**	**3**	**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

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	1	238
60-64		
65-69	2	1,789
70-74	1	50
75-79		
80-84	1	256
85-89		
90-94		
95-99		
100+		
Total	5	824

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

City of Eagle Point/2282
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
City of Eagle Point/2282

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

City of Eagle Point -- #2282

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Eagle Point 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 City of Eagle Point.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Eagle Point

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.01%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.08%)	(0.08%)	(0.08%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.54%**	**7.86%**	**11.97%**
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	**15.07%**	**8.31%**	**12.42%**

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

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

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 83%.

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	13.93%	13.93%
Minimum July 1, 2017 Rate	10.93%	7.93%
Maximum July 1, 2017 Rate	16.93%	19.93%

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	$1,747,730	$1,982,202	$234,472	88%	$783,617	30%
12/31/2009	2,041,520	2,211,444	169,924	92%	663,580	26%
12/31/2010	2,057,505	2,442,645	385,140	84%	614,657	63%
12/31/2011	2,019,516	2,540,783	521,267	79%	689,745	76%
12/31/2012	2,240,662	2,683,723	443,061	83%	732,095	61%
12/31/2013	2,361,983	2,848,056	486,073	83%	634,485	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.

City of Eagle Point

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$486,073	$443,061
Allocated pooled OPSRP UAL	44,862	51,600
Side account	0	0
Net unfunded pension actuarial accrued liability	530,935	494,661
Combined valuation payroll	634,485	732,095
Net pension UAL as a percentage of payroll	84%	68%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$8,782	$15,360

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	$48,061	$58,013
Tier 1/Tier 2 valuation payroll	343,042	394,738
Tier 1/Tier 2 pension normal cost rate	14.01%	14.70%
Tier 1/ Tier 2 Actuarial accrued liability	$2,848,056	$2,683,723
Actuarial asset value	2,361,983	2,240,662
Tier 1/Tier 2 Unfunded actuarial accrued liability	486,073	443,061
Tier 1/ Tier 2 Funded status	83%	83%
Combined valuation payroll	$634,485	$732,095
Tier 1/Tier 2 UAL as a percentage of payroll	77%	61%
Tier 1/Tier 2 UAL rate	(0.08%)	(0.77%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	5	6
Tier 1/Tier 2 dormant members	1	2
Tier 1/Tier 2 retirees and beneficiaries	10	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	634,485	732,095
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]	$61,484	$118,304
2. Employer reserves	992,300	1,144,523
3. Benefits in force reserve	1,308,199	977,835
4. Total market value of assets ***(1. + 2. + 3.)***	**$2,361,983**	**$2,240,662**

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	$2,240,662
2.	Regular employer contributions	29,402
3.	Benefit payments and expense	(202,515)
4.	Adjustments[2]	(40,093)
5.	Interest credited	334,527
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$2,361,983**

[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	$9,084	$8,569
Tier 1 General Service	0	0
Tier 2 Police & Fire	38,977	49,444
Tier 2 General Service	0	0
Total	**$48,061**	**$58,013**

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	$48,061	$48,061	$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	$86,691	$68,867
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	652,594	714,973
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$739,285**	**$783,840**
Dormant Members	0	252,096
Retired Members and Beneficiaries	2,108,771	1,647,787
Total Actuarial Accrued Liability	**$2,848,056**	**$2,683,723**

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	$2,848,056	$2,848,056	$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	$2,848,056	$2,683,723
2. Actuarial value of assets	2,361,983	2,240,662
3. Unfunded accrued liability *(1. – 2.)*	486,073	443,061
4. Funded percentage *(2. ÷ 1.)*	83%	83%
5. Combined valuation payroll	$634,485	$732,095
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	77%	61%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$486,073	$35,182
Total				**$486,073**	**$35,182**

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	$2,683,723
b. Normal cost at December 31, 2012	58,013
c. Benefit payments during 2013	(200,908)
d. Interest at 7.75% to December 31, 2013	204,699
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	2,745,527
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.)*	2,745,527
2. Actuarial accrued liability at December 31, 2013	2,848,056
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(102,529)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,240,662
b. Contributions for 2013[1]	29,402
c. Benefit payments and expenses during 2013	(202,515)
d. Interest at 7.75% to December 31, 2013	166,943
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	2,234,493
5. Actuarial value of assets at December 31, 2013	2,361,983
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	127,491
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$24,962**

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	**$443,061**
2. Expected increase	67,974
3. Liability (gain)/loss	102,529
4. Asset (gain)/loss	(127,491)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$486,073**

[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	$9,084	$66,079	13.75%	$8,569	$62,340	13.75%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	38,977	276,963	14.07%	49,444	332,398	14.87%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$48,061**	**$343,042**	**14.01%**	**$58,013**	**$394,738**	**14.70%**

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	$486,073	$443,061
2. Next year's Tier 1/Tier 2 UAL payment	35,182	32,069
3. Combined valuation payroll	634,485	732,095
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	5.54%	4.38%

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	14.01%	14.70%
b. Tier 1/Tier 2 UAL rate	5.54%	4.38%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	19.70%	19.21%

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	10.93%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.93%
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	83%
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%)*	7.93%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.93%
7. July 1, 2015 total pension rate, before adjustment	19.70%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(5.77%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	5.54%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.23%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.93%
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	14.01%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.01%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.93%

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	14.01%	14.70%
b. Tier 1/Tier 2 UAL rate	(0.23%)	(0.90%)
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%)*	13.93%	13.93%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$66,079	$66,079
Tier 2	0	276,963	276,963
Tier 1/Tier 2 valuation payroll	0	343,042	343,042
OPSRP valuation payroll	0	291,443	291,443
Combined valuation payroll	**$0**	**$634,485**	**$634,485**

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	4	4	9	1	5	5	11
Total	1	4	4	9	1	5	5	11
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	1	N/A	1	0	0	N/A	0
Total	0	1	N/A	1	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	1	1	2	1	1	0	2
Total	0	1	1	2	1	1	0	2
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	9	1	0	10	8	0	0	8
Total	9	1	0	10	8	0	0	8
Grand Total Number of Members	**10**	**7**	**5**	**22**	**10**	**6**	**5**	**21**

[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				1	1					2
45-49			1	1						2
50-54										
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	0	2	2	1	0	0	0	0	5

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	0
50-54		
55-59		
60-64		
65-69		
70-74		
75+		
Total	1	0

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	1,120
60-64	4	1,374
65-69	2	1,308
70-74	2	2,051
75-79	1	593
80-84		
85-89		
90-94		
95-99		
100+		
Total	10	1,392

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

City of Eugene/2111
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
City of Eugene/2111

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

City of Eugene -- #2111

September 2014

Secondary Employers

2141 City Of Eugene Public Library

CONTENTS

Executive Summary

Milliman has prepared this report for City of Eugene 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 City of Eugene.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Eugene

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.70%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	1.66%	1.66%	1.66%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**16.97%**	**9.60%**	**13.71%**
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	**17.50%**	**10.05%**	**14.16%**

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 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	16.36%	16.36%
Minimum July 1, 2017 Rate	13.09%	9.82%
Maximum July 1, 2017 Rate	19.63%	22.90%

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	$511,725,377	$636,242,912	$124,517,535	80%	$87,775,282	142%
12/31/2009	572,595,446	664,728,789	92,133,343	86%	89,005,209	104%
12/31/2010	608,092,209	692,573,860	84,481,651	88%	92,340,211	91%
12/31/2011	592,998,990	719,826,602	126,827,612	82%	95,549,026	133%
12/31/2012	647,467,866	707,760,655	60,292,789	91%	94,530,650	64%
12/31/2013	706,786,096	731,023,275	24,237,179	97%	90,070,653	27%

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.

City of Eugene

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$24,237,179	$60,292,789
Allocated pooled OPSRP UAL	6,368,543	6,662,780
Side account	0	0
Net unfunded pension actuarial accrued liability	30,605,722	66,955,569
Combined valuation payroll	90,070,653	94,530,650
Net pension UAL as a percentage of payroll	34%	71%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,246,674	$1,983,293

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	$8,409,396	$9,393,017
Tier 1/Tier 2 valuation payroll	57,188,418	62,792,186
Tier 1/Tier 2 pension normal cost rate	14.70%	14.96%
Tier 1/ Tier 2 Actuarial accrued liability	$731,023,275	$707,760,655
Actuarial asset value	706,786,096	647,467,866
Tier 1/Tier 2 Unfunded actuarial accrued liability	24,237,179	60,292,789
Tier 1/ Tier 2 Funded status	97%	91%
Combined valuation payroll	$90,070,653	$94,530,650
Tier 1/Tier 2 UAL as a percentage of payroll	27%	64%
Tier 1/Tier 2 UAL rate	1.66%	1.40%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	790	872
Tier 1/Tier 2 dormant members	362	388
Tier 1/Tier 2 retirees and beneficiaries	1,517	1,390

[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	90,070,653	94,530,650
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]	$77,630,795	$87,252,687
2. Employer reserves	327,089,281	298,582,146
3. Benefits in force reserve	302,066,020	261,633,032
4. Total market value of assets ***(1. + 2. + 3.)***	**$706,786,096**	**$647,467,866**

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

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	$647,467,866
2. Regular employer contributions	9,585,736
3. Benefit payments and expense	(46,761,086)
4. Adjustments[2]	3,450,444
5. Interest credited	93,043,136
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$706,786,096**

[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	$1,988,607	$2,205,997
Tier 1 General Service	2,793,903	3,433,459
Tier 2 Police & Fire	1,714,594	1,762,208
Tier 2 General Service	1,912,292	1,991,353
Total	**$8,409,396**	**$9,393,017**

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	$8,409,396	$8,409,396	$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	$60,114,091	$63,877,911
▪ Tier 1 General Service	85,709,667	101,853,318
▪ Tier 2 Police & Fire	27,677,757	26,006,005
▪ Tier 2 General Service	36,337,835	35,735,809
▪ **Total Active Members**	**$209,839,350**	**$227,473,043**
Dormant Members	34,264,116	39,399,824
Retired Members and Beneficiaries	486,919,809	440,887,788
Total Actuarial Accrued Liability	**$731,023,275**	**$707,760,655**

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	$731,023,275	$731,023,275	$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	$731,023,275	$707,760,655
2. Actuarial value of assets	706,786,096	647,467,866
3. Unfunded accrued liability *(1. – 2.)*	24,237,179	60,292,789
4. Funded percentage *(2. ÷ 1.)*	97%	91%
5. Combined valuation payroll	$90,070,653	$94,530,650
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	27%	64%

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	$24,237,179	$1,754,283
Total				**$24,237,179**	**$1,754,283**

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	$707,760,655
b. Normal cost at December 31, 2012	9,393,017
c. Benefit payments during 2013	(46,390,194)
d. Interest at 7.75% to December 31, 2013	53,781,790
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	724,545,268
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.)*	724,545,268
2. Actuarial accrued liability at December 31, 2013	731,023,275
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(6,478,007)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	647,467,866
b. Contributions for 2013[1]	9,585,736
c. Benefit payments and expenses during 2013	(46,761,086)
d. Interest at 7.75% to December 31, 2013	48,738,215
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	659,030,731
5. Actuarial value of assets at December 31, 2013	706,786,096
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	47,755,365
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$41,277,358**

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	**$60,292,789**
2. Expected increase	5,221,748
3. Liability (gain)/loss	6,478,007
4. Asset (gain)/loss	(47,755,365)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$24,237,179**

[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	$1,988,607	$11,204,387	17.75%	$2,205,997	$12,126,753	18.19%
Tier 1 General Service	2,793,903	16,771,852	16.66%	3,433,459	20,691,696	16.59%
Tier 2 Police & Fire	1,714,594	11,847,658	14.47%	1,762,208	11,539,688	15.27%
Tier 2 General Service	1,912,292	17,364,521	11.01%	1,991,353	18,434,049	10.80%
Total	**$8,409,396**	**$57,188,418**	**14.70%**	**$9,393,017**	**$62,792,186**	**14.96%**

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	$24,237,179	$60,292,789
2. Next year's Tier 1/Tier 2 UAL payment	1,754,283	4,363,983
3. Combined valuation payroll	90,070,653	94,530,650
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	1.95%	4.62%

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	14.70%	14.96%
b. Tier 1/Tier 2 UAL rate	1.95%	4.62%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	16.80%	19.71%

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	13.36%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.36%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.67%
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%)*	10.36%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	16.36%
7. July 1, 2015 total pension rate, before adjustment	16.80%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.44%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	1.95%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	1.51%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	16.36%
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	14.70%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.70%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	16.36%

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	14.70%	14.96%
b. Tier 1/Tier 2 UAL rate	1.51%	1.27%
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%)*	16.36%	16.36%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$16,771,852	$11,204,387	$27,976,239
Tier 2	17,364,521	11,847,658	29,212,179
Tier 1/Tier 2 valuation payroll	34,136,373	23,052,045	57,188,418
OPSRP valuation payroll	22,444,584	10,437,651	32,882,235
Combined valuation payroll	**$56,580,957**	**$33,489,696**	**$90,070,653**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	269	300	503	1,072	323	310	496	1,129
Police & Fire	102	119	126	347	117	122	118	357
Total	371	419	629	1,419	440	432	614	1,486
Active Members with previous service segments with the employer								
General Service	174	146	N/A	320	155	112	N/A	267
Police & Fire	15	15	N/A	30	11	9	N/A	20
Total	189	161	N/A	350	166	121	N/A	287
Dormant Members								
General Service	189	144	45	378	220	139	28	387
Police & Fire	15	14	4	33	14	15	4	33
Total	204	158	49	411	234	154	32	420
Retired Members and Beneficiaries								
General Service	1,066	55	6	1,127	950	60	4	1,014
Police & Fire	385	11	1	397	363	17	1	381
Total	1,451	66	7	1,524	1,313	77	5	1,395
Grand Total Number of Members	**2,215**	**804**	**685**	**3,704**	**2,153**	**784**	**651**	**3,588**

[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			1							**1**
30-34		3	12							**15**
35-39		3	48	10	2					**63**
40-44		4	82	49	7	2				**144**
45-49		1	58	40	32	11				**142**
50-54		1	36	43	29	29	4			**142**
55-59		1	41	42	38	31	15			**168**
60-64		1	19	24	20	20	3	2		**89**
65-69		1	11	2	3	4	2		1	**24**
70-74			1	1						**2**
75+										
Total	**0**	**15**	**309**	**211**	**131**	**97**	**24**	**2**	**1**	**790**

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	117
30-34	7	983
35-39	34	1,024
40-44	44	801
45-49	56	1,074
50-54	67	1,095
55-59	64	1,498
60-64	57	752
65-69	21	411
70-74	7	497
75+	4	233
Total	362	1,001

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	14	1,496
45-49	3	1,766
50-54	23	3,059
55-59	148	3,048
60-64	397	2,679
65-69	389	2,467
70-74	224	2,103
75-79	157	1,863
80-84	72	1,972
85-89	59	1,339
90-94	25	1,095
95-99	6	813
100+		
Total	1,517	2,365

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

City of Fossil/2248
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
City of Fossil/2248

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

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

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

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

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

September 2014
City of Fossil/2248

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

City of Fossil -- #2248

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Fossil 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 City of Fossil.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Fossil

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.29%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(2.88%)	(2.88%)	(2.88%)
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%**	**5.06%**	**9.17%**
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	**9.55%**	**5.51%**	**9.62%**

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 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	$477,376	$528,356	$50,980	90%	$74,613	68%
12/31/2009	538,898	546,282	7,384	99%	77,993	9%
12/31/2010	587,887	578,730	(9,157)	102%	80,610	(11%)
12/31/2011	579,010	654,449	75,439	88%	94,788	80%
12/31/2012	499,500	562,282	62,782	89%	69,765	90%
12/31/2013	544,706	567,476	22,770	96%	75,460	30%

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.

City of Fossil

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$22,770	$62,782
Allocated pooled OPSRP UAL	5,335	4,917
Side account	0	0
Net unfunded pension actuarial accrued liability	28,105	67,699
Combined valuation payroll	75,460	69,765
Net pension UAL as a percentage of payroll	37%	97%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,044	$1,464

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	$4,326	$4,261
Tier 1/Tier 2 valuation payroll	38,322	37,903
Tier 1/Tier 2 pension normal cost rate	11.29%	11.24%
Tier 1/ Tier 2 Actuarial accrued liability	$567,476	$562,282
Actuarial asset value	544,706	499,500
Tier 1/Tier 2 Unfunded actuarial accrued liability	22,770	62,782
Tier 1/ Tier 2 Funded status	96%	89%
Combined valuation payroll	$75,460	$69,765
Tier 1/Tier 2 UAL as a percentage of payroll	30%	90%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(2.88%)	(2.83%)
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	2	4
Tier 1/Tier 2 retirees and beneficiaries	4	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	75,460	69,765
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]	$61,269	$60,959
2. Employer reserves	252,346	216,626
3. Benefits in force reserve	231,091	221,914
4. Total market value of assets ***(1. + 2. + 3.)***	**$544,706**	**$499,500**

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	$499,500
2.	Regular employer contributions	1,748
3.	Benefit payments and expense	(35,774)
4.	Adjustments[2]	9,599
5.	Interest credited	69,633
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$544,706**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	$0	$0
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	4,326	4,261
Total	**$4,326**	**$4,261**

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	$4,326	$4,326	$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	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	62,116	54,811
▪ **Total Active Members**	**$62,116**	**$54,811**
Dormant Members	132,850	133,514
Retired Members and Beneficiaries	372,510	373,957
Total Actuarial Accrued Liability	**$567,476**	**$562,282**

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	$567,476	$567,476	$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	$567,476	$562,282
2. Actuarial value of assets	544,706	499,500
3. Unfunded accrued liability *(1. – 2.)*	22,770	62,782
4. Funded percentage *(2. ÷ 1.)*	96%	89%
5. Combined valuation payroll	$75,460	$69,765
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	30%	90%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$22,770	$1,648
Total				**$22,770**	**$1,648**

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	$562,282
b. Normal cost at December 31, 2012	4,261
c. Benefit payments during 2013	(35,490)
d. Interest at 7.75% to December 31, 2013	42,532
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	573,585
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.)*	573,585
2. Actuarial accrued liability at December 31, 2013	567,476
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	6,109
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	499,500
b. Contributions for 2013[1]	1,748
c. Benefit payments and expenses during 2013	(35,774)
d. Interest at 7.75% to December 31, 2013	37,393
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	502,866
5. Actuarial value of assets at December 31, 2013	544,706
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	41,840
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$47,949**

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	**$62,782**
2. Expected increase	7,937
3. Liability (gain)/loss	(6,109)
4. Asset (gain)/loss	(41,840)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$22,770**

[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	4,326	38,322	11.29%	4,261	37,903	11.24%
Total	**$4,326**	**$38,322**	**11.29%**	**$4,261**	**$37,903**	**11.24%**

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	$22,770	$62,782
2. Next year's Tier 1/Tier 2 UAL payment	1,648	4,544
3. Combined valuation payroll	75,460	69,765
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.18%	6.51%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	11.29%	11.24%
b. Tier 1/Tier 2 UAL rate	2.18%	6.51%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.62%	17.88%

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	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	13.62%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(5.21%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	2.18%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.03%)
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	11.29%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.29%
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	11.29%	11.24%
b. Tier 1/Tier 2 UAL rate	(3.03%)	(2.96%)
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	38,322	0	38,322
Tier 1/Tier 2 valuation payroll	38,322	0	38,322
OPSRP valuation payroll	37,138	0	37,138
Combined valuation payroll	**$75,460**	**$0**	**$75,460**

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

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**	**1**	**0**	**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	481
60-64	1	447
65-69		
70-74		
75+		
Total	2	464

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	508
60-64		
65-69	1	793
70-74		
75-79	2	797
80-84		
85-89		
90-94		
95-99		
100+		
Total	4	724

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

City of Gearhart/2309
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
City of Gearhart/2309

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

City of Gearhart -- #2309

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Gearhart 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 City of Gearhart.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Gearhart

	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]	(3.36%)	(3.36%)	(3.36%)
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%**	**4.58%**	**8.69%**
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%**	**5.03%**	**9.14%**

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	11.71%	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	$1,171,373	$1,096,661	($74,712)	107%	$381,660	(20%)
12/31/2009	1,341,751	1,213,117	(128,634)	111%	436,516	(29%)
12/31/2010	1,485,727	1,457,065	(28,662)	102%	423,943	(7%)
12/31/2011	1,434,130	1,606,043	171,913	89%	386,443	44%
12/31/2012	1,613,357	1,749,495	136,138	92%	519,547	26%
12/31/2013	1,831,231	1,837,530	6,299	100%	542,410	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.

City of Gearhart

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$6,299	$136,138
Allocated pooled OPSRP UAL	38,352	36,619
Side account	0	0
Net unfunded pension actuarial accrued liability	44,651	172,757
Combined valuation payroll	542,410	519,547
Net pension UAL as a percentage of payroll	8%	33%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$7,508	$10,900

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	$45,229	$43,371
Tier 1/Tier 2 valuation payroll	300,043	289,257
Tier 1/Tier 2 pension normal cost rate	15.07%	14.99%
Tier 1/ Tier 2 Actuarial accrued liability	$1,837,530	$1,749,495
Actuarial asset value	1,831,231	1,613,357
Tier 1/Tier 2 Unfunded actuarial accrued liability	6,299	136,138
Tier 1/ Tier 2 Funded status	100%	92%
Combined valuation payroll	$542,410	$519,547
Tier 1/Tier 2 UAL as a percentage of payroll	1%	26%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(3.36%)	(3.28%)
Tier 1/Tier 2 active members [1]	4	4
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	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	542,410	519,547
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]	$123,072	$108,903
2. Employer reserves	1,319,046	1,132,631
3. Benefits in force reserve	389,112	371,823
4. Total market value of assets *(1. + 2. + 3.)*	**$1,831,231**	**$1,613,357**

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	$1,613,357
2.	Regular employer contributions	8,983
3.	Benefit payments and expense	(60,236)
4.	Adjustments [2]	25,287
5.	Interest credited	243,841
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,831,231**

[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	$26,155	$25,553
Tier 1 General Service	0	0
Tier 2 Police & Fire	13,249	12,795
Tier 2 General Service	5,825	5,023
Total	**$45,229**	**$43,371**

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	$45,229	$45,229	$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	$883,212	$846,730
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	209,278	185,145
▪ Tier 2 General Service	117,804	91,046
▪ **Total Active Members**	**$1,210,294**	**$1,122,921**
Dormant Members	0	0
Retired Members and Beneficiaries	627,236	626,574
Total Actuarial Accrued Liability	**$1,837,530**	**$1,749,495**

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	$1,837,530	$1,837,530	$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	$1,837,530	$1,749,495
2. Actuarial value of assets	1,831,231	1,613,357
3. Unfunded accrued liability *(1. – 2.)*	6,299	136,138
4. Funded percentage *(2. ÷ 1.)*	100%	92%
5. Combined valuation payroll	$542,410	$519,547
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	1%	26%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$6,299	$456
Total				**$6,299**	**$456**

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	$1,749,495
b. Normal cost at December 31, 2012	43,371
c. Benefit payments during 2013	(59,759)
d. Interest at 7.75% to December 31, 2013	136,631
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,869,738
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 *(e. + f.)*	1,869,738
2. Actuarial accrued liability at December 31, 2013	1,837,530
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	32,208
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,613,357
b. Contributions for 2013[1]	8,983
c. Benefit payments and expenses during 2013	(60,236)
d. Interest at 7.75% to December 31, 2013	123,049
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,685,152
5. Actuarial value of assets at December 31, 2013	1,831,231
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	146,079
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$178,287**

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	**$136,138**
2. Expected increase	48,448
3. Liability (gain)/loss	(32,208)
4. Asset (gain)/loss	(146,079)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$6,299**

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	$26,155	$162,061	16.14%	$25,553	$162,762	15.70%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	13,249	71,837	18.44%	12,795	69,990	18.28%
Tier 2 General Service	5,825	66,145	8.81%	5,023	56,505	8.89%
Total	**$45,229**	**$300,043**	**15.07%**	**$43,371**	**$289,257**	**14.99%**

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	$6,299	$136,138
2. Next year's Tier 1/Tier 2 UAL payment	456	9,854
3. Combined valuation payroll	542,410	519,547
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.08%	1.90%

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%	14.99%
b. Tier 1/Tier 2 UAL rate	0.08%	1.90%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.30%	17.02%

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	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	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%)*	5.71%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.71%
7. July 1, 2015 total pension rate, before adjustment	15.30%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(3.59%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.08%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.51%)
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	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.)*	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	15.07%	14.99%
b. Tier 1/Tier 2 UAL rate	(3.51%)	(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%)*	11.71%	11.71%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$162,061	$162,061
Tier 2	66,145	71,837	137,982
Tier 1/Tier 2 valuation payroll	66,145	233,898	300,043
OPSRP valuation payroll	192,653	49,714	242,367
Combined valuation payroll	**$258,798**	**$283,612**	**$542,410**

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	4	5	0	1	4	5
Police & Fire	2	1	1	4	2	1	1	4
Total	2	2	5	9	2	2	5	9
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	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	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	**4**	**2**	**6**	**12**	**4**	**2**	**5**	**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			1							1
40-44				1						1
45-49										
50-54										
55-59						1				1
60-64			1							1
65-69										
70-74										
75+										
Total	0	0	2	1	0	1	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		
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	1,711
65-69	1	2,283
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	2	1,997

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

City of Gervais/2264
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
City of Gervais/2264

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

City of Gervais -- #2264

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Gervais 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 City of Gervais.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Gervais

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	10.37%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.00%	0.00%	0.00%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.98%**	**7.94%**	**12.05%**
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	**11.51%**	**8.39%**	**12.50%**

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 101%.

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	10.37%	10.37%
Minimum July 1, 2017 Rate	7.37%	4.37%
Maximum July 1, 2017 Rate	13.37%	16.37%

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	$739,278	$786,181	$46,903	94%	$347,867	13%
12/31/2009	860,297	931,540	71,243	92%	392,434	18%
12/31/2010	908,919	1,046,214	137,295	87%	365,611	38%
12/31/2011	925,700	1,131,043	205,343	82%	365,206	56%
12/31/2012	1,033,510	1,188,572	155,062	87%	548,250	28%
12/31/2013	1,100,555	1,090,245	(10,310)	101%	483,330	(2%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		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.

City of Gervais

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($10,310)	$155,062
Allocated pooled OPSRP UAL	34,174	38,642
Side account	0	0
Net unfunded pension actuarial accrued liability	23,864	193,704
Combined valuation payroll	483,330	548,250
Net pension UAL as a percentage of payroll	5%	35%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$6,690	$11,503

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	$16,359	$23,639
Tier 1/Tier 2 valuation payroll	157,716	196,576
Tier 1/Tier 2 pension normal cost rate	10.37%	12.03%
Tier 1/ Tier 2 Actuarial accrued liability	$1,090,245	$1,188,572
Actuarial asset value	1,100,555	1,033,510
Tier 1/Tier 2 Unfunded actuarial accrued liability	(10,310)	155,062
Tier 1/ Tier 2 Funded status	101%	87%
Combined valuation payroll	$483,330	$548,250
Tier 1/Tier 2 UAL as a percentage of payroll	(2%)	28%
Tier 1/Tier 2 UAL rate	0.00%	1.02%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	3	4
Tier 1/Tier 2 dormant members	2	2
Tier 1/Tier 2 retirees and beneficiaries	5	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	483,330	548,250
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]	$193,691	$175,288
2. Employer reserves	752,629	641,154
3. Benefits in force reserve	154,235	217,069
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,100,555**	**$1,033,510**

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	$1,033,510
2.	Regular employer contributions	10,461
3.	Benefit payments and expense	(23,876)
4.	Adjustments[2]	(59,131)
5.	Interest credited	139,591
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,100,555**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	$0	$8,835
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	16,359	14,804
Total	**$16,359**	**$23,639**

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	$16,359	$16,359	$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	$477,416	$513,170
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	49,729	43,567
▪ Tier 2 General Service	216,341	174,094
▪ **Total Active Members**	**$743,486**	**$730,831**
Dormant Members	98,138	91,950
Retired Members and Beneficiaries	248,621	365,791
Total Actuarial Accrued Liability	**$1,090,245**	**$1,188,572**

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	$1,090,245	$1,090,245	$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	$1,090,245	$1,188,572
2. Actuarial value of assets	1,100,555	1,033,510
3. Unfunded accrued liability *(1. – 2.)*	(10,310)	155,062
4. Funded percentage *(2. ÷ 1.)*	101%	87%
5. Combined valuation payroll	$483,330	$548,250
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(2%)	28%

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	($10,310)	($746)
Total				**($10,310)**	**($746)**

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	$1,188,572
b. Normal cost at December 31, 2012	23,639
c. Benefit payments during 2013	(23,687)
d. Interest at 7.75% to December 31, 2013	93,028
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,281,552
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.)*	1,281,552
2. Actuarial accrued liability at December 31, 2013	1,090,245
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	191,307
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,033,510
b. Contributions for 2013[1]	10,461
c. Benefit payments and expenses during 2013	(23,876)
d. Interest at 7.75% to December 31, 2013	79,577
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,099,672
5. Actuarial value of assets at December 31, 2013	1,100,555
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	883
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$192,190**

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	**$155,062**
2. Expected increase	26,818
3. Liability (gain)/loss	(191,307)
4. Asset (gain)/loss	(883)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($10,310)**

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%	$8,835	$53,607	16.48%
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	16,359	157,716	10.37%	14,804	142,969	10.35%
Total	**$16,359**	**$157,716**	**10.37%**	**$23,639**	**$196,576**	**12.03%**

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	($10,310)	$155,062
2. Next year's Tier 1/Tier 2 UAL payment	(746)	11,223
3. Combined valuation payroll	483,330	548,250
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.15%)	2.05%

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	10.37%	12.03%
b. Tier 1/Tier 2 UAL rate	(0.15%)	2.05%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	10.37%	14.21%

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	10.05%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.05%
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	101%
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%)*	7.05%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.05%
7. July 1, 2015 total pension rate, before adjustment	10.37%
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	(0.15%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.15%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	10.37%
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	10.37%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	10.37%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	10.37%

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	10.37%	12.03%
b. Tier 1/Tier 2 UAL rate	(0.15%)	0.89%
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%)*	10.37%	13.05%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	157,716	0	157,716
Tier 1/Tier 2 valuation payroll	157,716	0	157,716
OPSRP valuation payroll	139,074	186,540	325,614
Combined valuation payroll	**$296,790**	**$186,540**	**$483,330**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	0	3	4	7	0	3	4	7
Police & Fire	0	0	4	4	1	0	3	4
Total	0	3	8	11	1	3	7	11
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	6	1	N/A	7	2	1	N/A	3
Total	6	1	N/A	7	2	1	N/A	3
Dormant Members								
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
Retired Members and Beneficiaries								
General Service	4	0	0	4	4	1	0	5
Police & Fire	1	0	0	1	1	0	0	1
Total	5	0	0	5	5	1	0	6
Grand Total Number of Members	**13**	**4**	**8**	**25**	**10**	**5**	**7**	**22**

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

Data

Demographic Information (continued)

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

	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**
60-64			1							**1**
65-69										
70-74										
75+										
Total	**0**	**0**	**3**	**0**	**0**	**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	1	131
50-54		
55-59	1	566
60-64		
65-69		
70-74		
75+		
Total	2	349

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	247
60-64	1	786
65-69	1	178
70-74	1	417
75-79	1	102
80-84		
85-89		
90-94		
95-99		
100+		
Total	5	346

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

City of Gold Beach/2250
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
City of Gold Beach/2250

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

City of Gold Beach -- #2250

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Gold Beach 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 City of Gold Beach.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Gold Beach

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.23%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.25%)	(0.25%)	(0.25%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**13.59%**	**7.69%**	**11.80%**
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	**14.12%**	**8.14%**	**12.25%**

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 101%.

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	12.98%	12.98%
Minimum July 1, 2017 Rate	9.98%	6.98%
Maximum July 1, 2017 Rate	15.98%	18.98%

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	$2,042,171	$2,715,082	$672,911	75%	$553,062	122%
12/31/2009	2,363,600	2,799,170	435,570	84%	540,045	81%
12/31/2010	2,416,858	2,808,705	391,847	86%	665,234	59%
12/31/2011	2,267,242	2,685,284	418,042	84%	725,790	58%
12/31/2012	2,589,998	2,775,002	185,004	93%	668,568	28%
12/31/2013	2,977,221	2,935,300	(41,921)	101%	755,161	(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.

City of Gold Beach

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($41,921)	$185,004
Allocated pooled OPSRP UAL	53,394	47,123
Side account	0	0
Net unfunded pension actuarial accrued liability	11,473	232,127
Combined valuation payroll	755,161	668,568
Net pension UAL as a percentage of payroll	2%	35%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,452	$14,027

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	$56,190	$54,481
Tier 1/Tier 2 valuation payroll	424,615	416,880
Tier 1/Tier 2 pension normal cost rate	13.23%	13.07%
Tier 1/ Tier 2 Actuarial accrued liability	$2,935,300	$2,775,002
Actuarial asset value	2,977,221	2,589,998
Tier 1/Tier 2 Unfunded actuarial accrued liability	(41,921)	185,004
Tier 1/ Tier 2 Funded status	101%	93%
Combined valuation payroll	$755,161	$668,568
Tier 1/Tier 2 UAL as a percentage of payroll	(6%)	28%
Tier 1/Tier 2 UAL rate	(0.25%)	2.13%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	8	8
Tier 1/Tier 2 dormant members	3	3
Tier 1/Tier 2 retirees and beneficiaries	23	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	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	755,161	668,568
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]	$394,819	$353,087
2. Employer reserves	1,658,006	1,368,672
3. Benefits in force reserve	924,396	868,239
4. Total market value of assets ***(1. + 2. + 3.)***	**$2,977,221**	**$2,589,998**

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	$2,589,998
2.	Regular employer contributions	78,370
3.	Benefit payments and expense	(143,100)
4.	Adjustments[2]	66,663
5.	Interest credited	385,291
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$2,977,221**

[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	$11,372	$11,052
Tier 1 General Service	14,532	14,190
Tier 2 Police & Fire	15,306	14,863
Tier 2 General Service	14,980	14,376
Total	**$56,190**	**$54,481**

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	$56,190	$56,190	$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	$368,171	$338,762
▪ Tier 1 General Service	275,770	246,909
▪ Tier 2 Police & Fire	233,072	211,685
▪ Tier 2 General Service	239,575	213,314
▪ **Total Active Members**	**$1,116,588**	**$1,010,670**
Dormant Members	328,619	301,230
Retired Members and Beneficiaries	1,490,093	1,463,102
Total Actuarial Accrued Liability	**$2,935,300**	**$2,775,002**

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	$2,935,300	$2,935,300	$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	$2,935,300	$2,775,002
2. Actuarial value of assets	2,977,221	2,589,998
3. Unfunded accrued liability *(1. – 2.)*	(41,921)	185,004
4. Funded percentage *(2. ÷ 1.)*	101%	93%
5. Combined valuation payroll	$755,161	$668,568
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(6%)	28%

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	($41,921)	($3,034)
Total				**($41,921)**	**($3,034)**

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	$2,775,002
b. Normal cost at December 31, 2012	54,481
c. Benefit payments during 2013	(141,965)
d. Interest at 7.75% to December 31, 2013	213,784
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	2,901,302
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.)*	2,901,302
2. Actuarial accrued liability at December 31, 2013	2,935,300
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(33,998)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,589,998
b. Contributions for 2013[1]	78,370
c. Benefit payments and expenses during 2013	(143,100)
d. Interest at 7.75% to December 31, 2013	198,217
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	2,723,484
5. Actuarial value of assets at December 31, 2013	2,977,221
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	253,737
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$219,739**

Unfunded Accrued Liability Reconciliation

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

1. UAL at December 31, 2012	**$185,004**
2. Expected increase	(7,186)
3. Liability (gain)/loss	33,998
4. Asset (gain)/loss	(253,737)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($41,921)**

[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	$11,372	$60,675	18.74%	$11,052	$59,809	18.48%
Tier 1 General Service	14,532	130,659	11.12%	14,190	129,414	10.96%
Tier 2 Police & Fire	15,306	94,810	16.14%	14,863	92,259	16.11%
Tier 2 General Service	14,980	138,471	10.82%	14,376	135,398	10.62%
Total	**$56,190**	**$424,615**	**13.23%**	**$54,481**	**$416,880**	**13.07%**

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	($41,921)	$185,004
2. Next year's Tier 1/Tier 2 UAL payment	(3,034)	13,391
3. Combined valuation payroll	755,161	668,568
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.40%)	2.00%

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	13.23%	13.07%
b. Tier 1/Tier 2 UAL rate	(0.40%)	2.00%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	12.98%	15.20%

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	14.78%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	14.78%
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	101%
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%)*	11.78%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	17.78%
7. July 1, 2015 total pension rate, before adjustment	12.98%
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	(0.40%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.40%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.98%
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	13.23%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.23%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	12.98%

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	13.23%	13.07%
b. Tier 1/Tier 2 UAL rate	(0.40%)	2.00%
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%)*	12.98%	15.20%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$130,659	$60,675	$191,334
Tier 2	138,471	94,810	233,281
Tier 1/Tier 2 valuation payroll	269,130	155,485	424,615
OPSRP valuation payroll	239,591	90,955	330,546
Combined valuation payroll	**$508,721**	**$246,440**	**$755,161**

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	3	7	12	2	3	6	11
Police & Fire	1	2	2	5	1	2	2	5
Total	3	5	9	17	3	5	8	16
Active Members with previous service segments with the employer								
General Service	2	0	N/A	2	0	0	N/A	0
Police & Fire	1	2	N/A	3	1	1	N/A	2
Total	3	2	N/A	5	1	1	N/A	2
Dormant Members								
General Service	1	0	1	2	2	0	0	2
Police & Fire	2	0	1	3	1	0	1	2
Total	3	0	2	5	3	0	1	4
Retired Members and Beneficiaries								
General Service	9	0	0	9	8	0	0	8
Police & Fire	13	1	0	14	13	1	0	14
Total	22	1	0	23	21	1	0	22
Grand Total Number of Members	**31**	**8**	**11**	**50**	**28**	**7**	**9**	**44**

[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							2
45-49			1	1	2					4
50-54			1	1						2
55-59										
60-64										
65-69										
70-74										
75+										
Total	0	1	3	2	2	0	0	0	0	8

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	3,481
55-59	2	143
60-64		
65-69		
70-74		
75+		
Total	3	1,255

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	2	443
60-64	7	367
65-69	2	507
70-74	7	709
75-79	4	517
80-84	1	163
85-89		
90-94		
95-99		
100+		
Total	23	507

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

City of Gresham/2114
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
City of Gresham/2114

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

City of Gresham -- #2114

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Gresham 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 City of Gresham.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Gresham

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.37%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.67%)	(0.67%)	(0.67%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	(4.17%)	(4.17%)	(4.17%)
Net pension contribution rate	**11.14%**	**3.10%**	**7.21%**
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	**11.67%**	**3.55%**	**7.66%**

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 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	14.70%	14.70%
Minimum July 1, 2017 Rate	11.70%	8.70%
Maximum July 1, 2017 Rate	17.70%	20.70%

Executive Summary

Accounting Information

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

Pension

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

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	$168,862,078	$190,868,772	$22,006,694	88%	$37,629,676	58%
12/31/2009	189,958,934	203,674,858	13,715,925	93%	37,704,039	36%
12/31/2010	201,010,560	214,467,396	13,456,836	94%	39,906,096	34%
12/31/2011	198,059,438	225,555,045	27,495,606	88%	38,944,096	71%
12/31/2012	217,937,233	227,671,406	9,734,173	96%	39,541,683	25%
12/31/2013	236,982,167	241,803,112	4,820,945	98%	40,300,650	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.

City of Gresham

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$22,810,915	$26,571,471
Allocated pooled OPSRP UAL	2,849,501	2,787,007
Side account	17,989,970	16,837,297
Net unfunded pension actuarial accrued liability	7,670,446	12,521,181
Combined valuation payroll	40,300,650	39,541,683
Net pension UAL as a percentage of payroll	19%	32%
Calculated side account rate relief	(4.17%)	(3.78%)
Allocated pooled RHIA UAL	$557,804	$829,601

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	$3,884,928	$4,156,817
Tier 1/Tier 2 valuation payroll	25,272,078	26,870,365
Tier 1/Tier 2 pension normal cost rate	15.37%	15.47%
Tier 1/ Tier 2 Actuarial accrued liability	$241,803,112	$227,671,406
Actuarial asset value	218,992,197	201,099,935
Tier 1/Tier 2 Unfunded actuarial accrued liability	22,810,915	26,571,471
Tier 1/ Tier 2 Funded status	91%	88%
Combined valuation payroll	$40,300,650	$39,541,683
Tier 1/Tier 2 UAL as a percentage of payroll	57%	67%
Tier 1/Tier 2 UAL rate	(0.67%)	(0.77%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	285	319
Tier 1/Tier 2 dormant members	122	120
Tier 1/Tier 2 retirees and beneficiaries	415	380

[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**	**$16,837,297**	**$16,837,297**
2. Deposits made during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(1,423,078)	(1,423,078)
5. Side account earnings during 2013		2,576,750	2,576,750
6. Side account as of December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***		**$17,989,970**	**$17,989,970**

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side account 1	$17,989,970	$16,837,297
Side account 2	0	0
Side account 3	0	0
Total	**$17,989,970**	**$16,837,297**

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	$17,989,970	$16,837,297
2. Combined valuation payroll	40,300,650	39,541,683
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	(4.17%)	(3.78%)

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

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]	$31,926,578	$34,510,179
2. Employer reserves	104,829,704	98,044,299
3. Benefits in force reserve	82,235,915	68,545,457
4. Total market value of assets ***(1. + 2. + 3.)***	**$218,992,197**	**$201,099,935**

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	$201,099,935
2. Regular employer contributions	1,673,710
3. Benefit payments and expense	(12,730,464)
4. Adjustments[2]	(1,446,719)
5. Interest credited	28,972,657
6. Total transferred from side accounts	1,423,078
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$218,992,197**

[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	$1,433,654	$1,607,512
Tier 1 General Service	984,235	1,091,067
Tier 2 Police & Fire	895,960	832,941
Tier 2 General Service	571,079	625,297
Total	**$3,884,928**	**$4,156,817**

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	$3,884,928	$3,884,928	$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

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

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	$43,604,254	$47,578,806
▪ Tier 1 General Service	24,482,025	26,468,387
▪ Tier 2 Police & Fire	15,313,005	13,143,029
▪ Tier 2 General Service	11,479,463	11,374,589
▪ **Total Active Members**	**$94,878,747**	**$98,564,811**
Dormant Members	14,362,961	13,598,034
Retired Members and Beneficiaries	132,561,404	115,508,561
Total Actuarial Accrued Liability	**$241,803,112**	**$227,671,406**

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	$241,803,112	$241,803,112	$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	$241,803,112	$227,671,406
2. Actuarial value of assets	218,992,197	201,099,935
3. Unfunded accrued liability *(1. – 2.)*	22,810,915	26,571,471
4. Funded percentage *(2. ÷ 1.)*	91%	88%
5. Combined valuation payroll	$40,300,650	$39,541,683
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	57%	67%

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	$22,810,915	$1,651,051
Total				**$22,810,915**	**$1,651,051**

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	$227,671,406
b. Normal cost at December 31, 2012	4,156,817
c. Benefit payments during 2013	(12,629,491)
d. Interest at 7.75% to December 31, 2013	17,477,295
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	236,676,027
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.)*	236,676,027
2. Actuarial accrued liability at December 31, 2013	241,803,112
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(5,127,085)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	201,099,935
b. Contributions for 2013[1]	3,096,788
c. Benefit payments and expenses during 2013	(12,730,464)
d. Interest at 7.75% to December 31, 2013	15,211,940
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	206,678,199
5. Actuarial value of assets at December 31, 2013	218,992,197
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	12,313,998
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$7,186,913**

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	**$26,571,471**
2. Expected increase	3,426,357
3. Liability (gain)/loss	5,127,085
4. Asset (gain)/loss	(12,313,998)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$22,810,915**

[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	$1,433,654	$7,855,121	18.25%	$1,607,512	$8,701,297	18.47%
Tier 1 General Service	984,235	6,217,812	15.83%	1,091,067	6,815,713	16.01%
Tier 2 Police & Fire	895,960	5,911,889	15.16%	832,941	5,500,693	15.14%
Tier 2 General Service	571,079	5,287,256	10.80%	625,297	5,852,662	10.68%
Total	**$3,884,928**	**$25,272,078**	**15.37%**	**$4,156,817**	**$26,870,365**	**15.47%**

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	$22,810,915	$26,571,471
2. Next year's Tier 1/Tier 2 UAL payment	1,651,051	1,923,239
3. Combined valuation payroll	40,300,650	39,541,683
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	4.10%	4.86%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.37%	15.47%
b. Tier 1/Tier 2 UAL rate	4.10%	4.86%
c. Multnomah Fire District #10 rate	0.30%	0.26%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	19.77%	20.59%

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	8.18%
2. Employer contribution rate attributable to side accounts	(3.52%)
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	11.70%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.34%
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%)*	8.70%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	14.70%
7. July 1, 2015 total pension rate, before adjustment	19.77%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(5.07%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	4.10%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.97%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	14.70%
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	15.37%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.37%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	14.70%

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	15.37%	15.47%
b. Tier 1/Tier 2 UAL rate	(0.97%)	(1.03%)
c. Multnomah Fire District #10 rate	0.30%	0.26%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c., minimum of 5.47%)*	14.70%	14.70%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$6,217,812	$7,855,121	$14,072,933
Tier 2	5,287,256	5,911,889	11,199,145
Tier 1/Tier 2 valuation payroll	11,505,068	13,767,010	25,272,078
OPSRP valuation payroll	8,669,965	6,358,607	15,028,572
Combined valuation payroll	**$20,175,033**	**$20,125,617**	**$40,300,650**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	82	77	134	293	93	88	121	302
Police & Fire	69	57	71	197	81	57	61	199
Total	151	134	205	490	174	145	182	501
Active Members with previous service segments with the employer								
General Service	39	41	N/A	80	42	28	N/A	70
Police & Fire	15	14	N/A	29	14	14	N/A	28
Total	54	55	N/A	109	56	42	N/A	98
Dormant Members								
General Service	51	44	12	107	58	39	12	109
Police & Fire	16	11	1	28	14	9	1	24
Total	67	55	13	135	72	48	13	133
Retired Members and Beneficiaries								
General Service	252	21	0	273	231	21	0	252
Police & Fire	138	4	1	143	116	12	1	129
Total	390	25	1	416	347	33	1	381
Grand Total Number of Members	**662**	**269**	**219**	**1,150**	**649**	**268**	**196**	**1,113**

[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			4							**4**
35-39		2	24	4						**30**
40-44		3	22	13	5					**43**
45-49		1	13	18	17	6				**55**
50-54		1	15	10	16	23	3			**68**
55-59			7	11	18	4	3	1		**44**
60-64		1	4	10	9	5	2	1		**32**
65-69			3	4	2					**9**
70-74										
75+										
Total	**0**	**8**	**92**	**70**	**67**	**38**	**8**	**2**	**0**	**285**

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	1	2,084
35-39	10	715
40-44	21	1,057
45-49	10	604
50-54	30	1,799
55-59	26	999
60-64	12	1,905
65-69	8	684
70-74	4	531
75+		
Total	122	1,212

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	4	2,114
45-49	1	122
50-54	18	3,874
55-59	47	2,684
60-64	122	2,362
65-69	112	2,138
70-74	54	2,233
75-79	31	1,358
80-84	16	1,409
85-89	6	1,327
90-94	1	864
95-99	3	347
100+		
Total	415	2,234

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

City of Helix/2210
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
City of Helix/2210

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

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

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

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

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

September 2014
City of Helix/2210

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

City of Helix -- #2210

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Helix 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 City of Helix.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Helix

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.23%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(2.88%)	(2.88%)	(2.88%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.96%**	**5.06%**	**9.17%**
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	**9.49%**	**5.51%**	**9.62%**

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 114%.

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	8.35%	8.35%
Minimum July 1, 2017 Rate	5.35%	2.35%
Maximum July 1, 2017 Rate	11.35%	14.35%

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	$76,476	$76,151	($325)	100%	$31,023	(1%)
12/31/2009	88,754	81,883	(6,871)	108%	32,415	(21%)
12/31/2010	97,418	87,836	(9,582)	111%	33,907	(28%)
12/31/2011	98,078	94,599	(3,479)	104%	34,741	(10%)
12/31/2012	111,566	106,424	(5,142)	105%	35,461	(15%)
12/31/2013	127,277	112,123	(15,154)	114%	36,262	(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.

City of Helix

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($15,154)	($5,142)
Allocated pooled OPSRP UAL	2,564	2,499
Side account	0	0
Net unfunded pension actuarial accrued liability	(12,590)	(2,643)
Combined valuation payroll	36,262	35,461
Net pension UAL as a percentage of payroll	(35%)	(7%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$502	$744

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	$4,073	$3,971
Tier 1/Tier 2 valuation payroll	36,262	35,461
Tier 1/Tier 2 pension normal cost rate	11.23%	11.20%
Tier 1/ Tier 2 Actuarial accrued liability	$112,123	$106,424
Actuarial asset value	127,277	111,566
Tier 1/Tier 2 Unfunded actuarial accrued liability	(15,154)	(5,142)
Tier 1/ Tier 2 Funded status	114%	105%
Combined valuation payroll	$36,262	$35,461
Tier 1/Tier 2 UAL as a percentage of payroll	(42%)	(15%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(2.88%)	(1.05%)
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	0	0
Tier 1/Tier 2 retirees and beneficiaries	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	36,262	35,461
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]	$342	$295
2. Employer reserves	91,300	76,293
3. Benefits in force reserve	35,636	34,978
4. Total market value of assets *(1. + 2. + 3.)*	**$127,277**	**$111,566**

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	$111,566
2.	Regular employer contributions	2,721
3.	Benefit payments and expense	(5,517)
4.	Adjustments[2]	1,333
5.	Interest credited	17,174
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$127,277**

[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	4,073	3,971
Total	**$4,073**	**$3,971**

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	$4,073	$4,073	$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	54,680	47,482
▪ **Total Active Members**	**$54,680**	**$47,482**
Dormant Members	0	0
Retired Members and Beneficiaries	57,443	58,942
Total Actuarial Accrued Liability	**$112,123**	**$106,424**

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	$112,123	$112,123	$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	$112,123	$106,424
2. Actuarial value of assets	127,277	111,566
3. Unfunded accrued liability *(1. – 2.)*	(15,154)	(5,142)
4. Funded percentage *(2. ÷ 1.)*	114%	105%
5. Combined valuation payroll	$36,262	$35,461
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(42%)	(15%)

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	($15,154)	($1,097)
Total				**($15,154)**	**($1,097)**

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	$106,424
b. Normal cost at December 31, 2012	3,971
c. Benefit payments during 2013	(5,473)
d. Interest at 7.75% to December 31, 2013	8,344
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	113,266
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.)*	113,266
2. Actuarial accrued liability at December 31, 2013	112,123
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	1,143
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	111,566
b. Contributions for 2013[1]	2,721
c. Benefit payments and expenses during 2013	(5,517)
d. Interest at 7.75% to December 31, 2013	8,538
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	117,308
5. Actuarial value of assets at December 31, 2013	127,277
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	9,969
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$11,112**

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	**($5,142)**
2. Expected increase	1,100
3. Liability (gain)/loss	(1,143)
4. Asset (gain)/loss	(9,969)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($15,154)**

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	4,073	36,262	11.23%	3,971	35,461	11.20%
Total	**$4,073**	**$36,262**	**11.23%**	**$3,971**	**$35,461**	**11.20%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	($15,154)	($5,142)
2. Next year's Tier 1/Tier 2 UAL payment	(1,097)	(372)
3. Combined valuation payroll	36,262	35,461
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(3.03%)	(1.05%)

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	11.23%	11.20%
b. Tier 1/Tier 2 UAL rate	(3.03%)	(1.05%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	8.35%	10.28%

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	7.15%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	7.15%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.43%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	114%
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%)*	4.15%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	10.15%
7. July 1, 2015 total pension rate, before adjustment	8.35%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.03%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.03%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.35%
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	11.23%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.23%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	8.35%

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	11.23%	11.20%
b. Tier 1/Tier 2 UAL rate	(3.03%)	(1.18%)
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%)*	8.35%	10.15%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	36,262	0	36,262
Tier 1/Tier 2 valuation payroll	36,262	0	36,262
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$36,262**	**$0**	**$36,262**

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	2	0	0	2	2	0	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	2	0	0	2	2	0	0	2
Grand Total Number of Members	**2**	**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			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		
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	35
70-74	1	329
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	2	182

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

City of Hillsboro/2115
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
City of Hillsboro/2115

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

City of Hillsboro -- #2115

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Hillsboro 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 City of Hillsboro.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Hillsboro

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.42%	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	**15.48%**	**9.39%**	**13.50%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**16.01%**	**9.84%**	**13.95%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 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	14.87%	14.87%
Minimum July 1, 2017 Rate	11.87%	8.87%
Maximum July 1, 2017 Rate	17.87%	20.87%

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	$106,241,074	$134,764,925	$28,523,851	79%	$42,692,804	67%
12/31/2009	122,679,132	145,509,269	22,830,137	84%	44,456,632	51%
12/31/2010	132,782,298	155,805,361	23,023,063	85%	47,678,323	48%
12/31/2011	131,672,972	163,806,911	32,133,939	80%	49,565,888	65%
12/31/2012	146,542,313	171,483,160	24,940,847	85%	52,063,096	48%
12/31/2013	164,443,987	180,158,593	15,714,606	91%	54,358,247	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.

City of Hillsboro

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$15,714,606	$24,940,847
Allocated pooled OPSRP UAL	3,843,459	3,669,550
Side account	0	0
Net unfunded pension actuarial accrued liability	19,558,065	28,610,397
Combined valuation payroll	54,358,247	52,063,096
Net pension UAL as a percentage of payroll	36%	55%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$752,376	$1,092,306

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	$4,274,791	$4,290,311
Tier 1/Tier 2 valuation payroll	31,861,710	32,018,645
Tier 1/Tier 2 pension normal cost rate	13.42%	13.40%
Tier 1/ Tier 2 Actuarial accrued liability	$180,158,593	$171,483,160
Actuarial asset value	164,443,987	146,542,313
Tier 1/Tier 2 Unfunded actuarial accrued liability	15,714,606	24,940,847
Tier 1/ Tier 2 Funded status	91%	85%
Combined valuation payroll	$54,358,247	$52,063,096
Tier 1/Tier 2 UAL as a percentage of payroll	29%	48%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	1.45%	1.47%
Tier 1/Tier 2 active members [1]	377	393
Tier 1/Tier 2 dormant members	133	125
Tier 1/Tier 2 retirees and beneficiaries	329	306

[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	54,358,247	52,063,096
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]	$25,224,289	$24,393,283
2. Employer reserves	87,587,877	74,626,520
3. Benefits in force reserve	51,631,821	47,522,510
4. Total market value of assets ***(1. + 2. + 3.)***	**$164,443,987**	**$146,542,313**

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	$146,542,313
2. Regular employer contributions	4,048,013
3. Benefit payments and expense	(7,992,822)
4. Adjustments [2]	445,100
5. Interest credited	21,401,384
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$164,443,987**

[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	$1,000,529	$965,301
Tier 1 General Service	953,330	1,045,281
Tier 2 Police & Fire	1,271,391	1,212,192
Tier 2 General Service	1,049,541	1,067,537
Total	**$4,274,791**	**$4,290,311**

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	$4,274,791	$4,274,791	$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	$27,693,981	$25,887,555
▪ Tier 1 General Service	23,355,354	23,808,447
▪ Tier 2 Police & Fire	19,642,082	17,265,210
▪ Tier 2 General Service	18,859,794	17,990,694
▪ **Total Active Members**	**$89,551,211**	**$84,951,906**
Dormant Members	7,378,700	6,449,262
Retired Members and Beneficiaries	83,228,682	80,081,992
Total Actuarial Accrued Liability	**$180,158,593**	**$171,483,160**

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	$180,158,593	$180,158,593	$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	$180,158,593	$171,483,160
2. Actuarial value of assets	164,443,987	146,542,313
3. Unfunded accrued liability *(1. – 2.)*	15,714,606	24,940,847
4. Funded percentage *(2. ÷ 1.)*	91%	85%
5. Combined valuation payroll	$54,358,247	$52,063,096
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	29%	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	$15,714,606	$1,137,421
Total				**$15,714,606**	**$1,137,421**

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	$171,483,160
b. Normal cost at December 31, 2012	4,290,311
c. Benefit payments during 2013	(7,929,426)
d. Interest at 7.75% to December 31, 2013	13,315,179
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	181,159,224
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.)*	181,159,224
2. Actuarial accrued liability at December 31, 2013	180,158,593
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	1,000,631
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	146,542,313
b. Contributions for 2013[1]	4,048,013
c. Benefit payments and expenses during 2013	(7,992,822)
d. Interest at 7.75% to December 31, 2013	11,204,168
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	153,801,671
5. Actuarial value of assets at December 31, 2013	164,443,987
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	10,642,316
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$11,642,947**

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	**$24,940,847**
2. Expected increase	2,416,706
3. Liability (gain)/loss	(1,000,631)
4. Asset (gain)/loss	(10,642,316)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$15,714,606**

[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	$1,000,529	$5,914,307	16.92%	$965,301	$5,767,951	16.74%
Tier 1 General Service	953,330	6,871,017	13.87%	1,045,281	7,450,272	14.03%
Tier 2 Police & Fire	1,271,391	8,606,540	14.77%	1,212,192	8,237,235	14.72%
Tier 2 General Service	1,049,541	10,469,846	10.02%	1,067,537	10,563,187	10.11%
Total	**$4,274,791**	**$31,861,710**	**13.42%**	**$4,290,311**	**$32,018,645**	**13.40%**

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	$15,714,606	$24,940,847
2. Next year's Tier 1/Tier 2 UAL payment	1,137,421	1,805,215
3. Combined valuation payroll	54,358,247	52,063,096
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.09%	3.47%

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	13.42%	13.40%
b. Tier 1/Tier 2 UAL rate	2.09%	3.47%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.66%	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	11.87%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	11.87%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.37%
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%)*	8.87%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	14.87%
7. July 1, 2015 total pension rate, before adjustment	15.66%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.79%)
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.)*	1.30%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	14.87%
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	13.42%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.42%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	14.87%

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	13.42%	13.40%
b. Tier 1/Tier 2 UAL rate	1.30%	1.34%
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%)*	14.87%	14.87%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$6,871,017	$5,914,307	$12,785,324
Tier 2	10,469,846	8,606,540	19,076,386
Tier 1/Tier 2 valuation payroll	17,340,863	14,520,847	31,861,710
OPSRP valuation payroll	16,598,288	5,898,249	22,496,537
Combined valuation payroll	**$33,939,151**	**$20,419,096**	**$54,358,247**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	90	147	325	562	100	153	317	570
Police & Fire	56	84	69	209	56	84	63	203
Total	146	231	394	771	156	237	380	773
Active Members with previous service segments with the employer								
General Service	78	104	N/A	182	70	89	N/A	159
Police & Fire	11	9	N/A	20	8	7	N/A	15
Total	89	113	N/A	202	78	96	N/A	174
Dormant Members								
General Service	53	61	28	142	52	57	19	128
Police & Fire	11	8	4	23	11	5	5	21
Total	64	69	32	165	63	62	24	149
Retired Members and Beneficiaries								
General Service	205	28	4	237	186	23	2	211
Police & Fire	93	3	1	97	87	10	1	98
Total	298	31	5	334	273	33	3	309
Grand Total Number of Members	**597**	**444**	**431**	**1,472**	**570**	**428**	**407**	**1,405**

[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	10	1						**12**
35-39	1	5	40	5						**51**
40-44			37	24	9					**70**
45-49			30	33	20	2				**85**
50-54	1		17	20	16	6	1			**61**
55-59		1	14	16	8	8	6			**53**
60-64			14	11	8	3		1		**37**
65-69			4	1	3					**8**
70-74										
75+										
Total	**2**	**7**	**166**	**111**	**64**	**19**	**7**	**1**	**0**	**377**

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	0
30-34	2	80
35-39	14	513
40-44	22	641
45-49	26	525
50-54	24	1,031
55-59	21	820
60-64	13	172
65-69	9	322
70-74	1	195
75+		
Total	133	620

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	4	1,908
45-49	1	1,347
50-54	18	2,622
55-59	32	1,763
60-64	103	2,062
65-69	78	1,815
70-74	46	1,200
75-79	21	1,445
80-84	15	1,008
85-89	8	720
90-94	2	1,264
95-99	1	405
100+		
Total	329	1,750

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

City of Jacksonville/2222
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
City of Jacksonville/2222

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

City of Jacksonville -- #2222

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Jacksonville 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 City of Jacksonville.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Jacksonville

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.14%	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	**14.57%**	**7.76%**	**11.87%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**15.10%**	**8.21%**	**12.32%**

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 101%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	13.96%	13.96%
Minimum July 1, 2017 Rate	10.96%	7.96%
Maximum July 1, 2017 Rate	16.96%	19.96%

Executive Summary

Accounting Information

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

Pension

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

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	$2,427,908	$2,950,462	$522,554	82%	$931,696	56%
12/31/2009	2,892,816	3,153,727	260,911	92%	907,545	29%
12/31/2010	3,089,410	3,322,938	233,528	93%	939,937	25%
12/31/2011	3,132,652	3,510,590	377,938	89%	877,859	43%
12/31/2012	3,582,220	3,837,033	254,814	93%	989,332	26%
12/31/2013	4,093,913	4,052,248	(41,665)	101%	902,763	(5%)

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.

City of Jacksonville

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($41,665)	$254,813
Allocated pooled OPSRP UAL	63,831	69,731
Side account	0	0
Net unfunded pension actuarial accrued liability	22,166	324,544
Combined valuation payroll	902,763	989,332
Net pension UAL as a percentage of payroll	2%	33%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,495	$20,757

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	$72,413	$76,586
Tier 1/Tier 2 valuation payroll	512,056	534,866
Tier 1/Tier 2 pension normal cost rate	14.14%	14.32%
Tier 1/ Tier 2 Actuarial accrued liability	$4,052,248	$3,837,033
Actuarial asset value	4,093,913	3,582,220
Tier 1/Tier 2 Unfunded actuarial accrued liability	(41,665)	254,813
Tier 1/ Tier 2 Funded status	101%	93%
Combined valuation payroll	$902,763	$989,332
Tier 1/Tier 2 UAL as a percentage of payroll	(5%)	26%
Tier 1/Tier 2 UAL rate	(0.18%)	(0.24%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	10	11
Tier 1/Tier 2 dormant members	6	5
Tier 1/Tier 2 retirees and beneficiaries	11	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	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	902,763	989,332
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]	$854,485	$766,399
2. Employer reserves	2,596,479	2,191,511
3. Benefits in force reserve	642,949	624,310
4. Total market value of assets ***(1. + 2. + 3.)***	**$4,093,913**	**$3,582,220**

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	$3,582,220
2. Regular employer contributions	55,537
3. Benefit payments and expense	(99,531)
4. Adjustments [2]	36,306
5. Interest credited	519,381
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$4,093,913**

[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	$30,755	$29,620
Tier 1 General Service	24,089	23,250
Tier 2 Police & Fire	7,400	13,869
Tier 2 General Service	10,169	9,847
Total	**$72,413**	**$76,586**

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	$72,413	$72,413	$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	$775,120	$697,565
▪ Tier 1 General Service	989,812	890,116
▪ Tier 2 Police & Fire	355,431	365,264
▪ Tier 2 General Service	295,874	274,154
▪ **Total Active Members**	**$2,416,237**	**$2,227,099**
Dormant Members	599,600	557,885
Retired Members and Beneficiaries	1,036,411	1,052,049
Total Actuarial Accrued Liability	**$4,052,248**	**$3,837,033**

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	$4,052,248	$4,052,248	$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	$4,052,248	$3,837,033
2. Actuarial value of assets	4,093,913	3,582,220
3. Unfunded accrued liability *(1. – 2.)*	(41,665)	254,813
4. Funded percentage *(2. ÷ 1.)*	101%	93%
5. Combined valuation payroll	$902,763	$989,332
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(5%)	26%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	($41,665)	($3,016)
Total				**($41,665)**	**($3,016)**

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	$3,837,033
b. Normal cost at December 31, 2012	76,586
c. Benefit payments during 2013	(98,742)
d. Interest at 7.75% to December 31, 2013	299,479
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	4,114,356
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 *(e. + f.)*	4,114,356
2. Actuarial accrued liability at December 31, 2013	4,052,248
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	62,108
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	3,582,220
b. Contributions for 2013[1]	55,537
c. Benefit payments and expenses during 2013	(99,531)
d. Interest at 7.75% to December 31, 2013	275,917
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	3,814,143
5. Actuarial value of assets at December 31, 2013	4,093,913
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	279,770
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$341,878**

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	**$254,813**
2. Expected increase	45,400
3. Liability (gain)/loss	(62,108)
4. Asset (gain)/loss	(279,770)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($41,665)**

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	$30,755	$172,543	17.82%	$29,620	$169,219	17.50%
Tier 1 General Service	24,089	208,339	11.56%	23,250	201,896	11.52%
Tier 2 Police & Fire	7,400	44,429	16.66%	13,869	77,880	17.81%
Tier 2 General Service	10,169	86,745	11.72%	9,847	85,871	11.47%
Total	**$72,413**	**$512,056**	**14.14%**	**$76,586**	**$534,866**	**14.32%**

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	($41,665)	$254,813
2. Next year's Tier 1/Tier 2 UAL payment	(3,016)	18,443
3. Combined valuation payroll	902,763	989,332
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.33%)	1.86%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.14%	14.32%
b. Tier 1/Tier 2 UAL rate	(0.33%)	1.86%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.96%	16.31%

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	11.08%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	11.08%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.22%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	101%
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%)*	8.08%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	14.08%
7. July 1, 2015 total pension rate, before adjustment	13.96%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(0.33%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.33%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.96%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	14.14%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.14%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.96%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	**Advisory July 1, 2015 Rates calculated as of December 31, 2012**
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.14%	14.32%
b. Tier 1/Tier 2 UAL rate	(0.33%)	(0.37%)
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%)*	13.96%	14.08%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$208,339	$172,543	$380,882
Tier 2	86,745	44,429	131,174
Tier 1/Tier 2 valuation payroll	295,084	216,972	512,056
OPSRP valuation payroll	156,633	234,074	390,707
Combined valuation payroll	**$451,717**	**$451,046**	**$902,763**

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	2	4	10	4	2	5	11
Police & Fire	3	1	7	11	3	2	8	13
Total	7	3	11	21	7	4	13	24
Active Members with previous service segments with the employer								
General Service	3	2	N/A	5	0	1	N/A	1
Police & Fire	3	4	N/A	7	2	2	N/A	4
Total	6	6	N/A	12	2	3	N/A	5
Dormant Members								
General Service	3	2	0	5	3	1	0	4
Police & Fire	1	0	0	1	1	0	1	2
Total	4	2	0	6	4	1	1	6
Retired Members and Beneficiaries								
General Service	4	2	0	6	4	2	0	6
Police & Fire	5	0	0	5	5	0	0	5
Total	9	2	0	11	9	2	0	11
Grand Total Number of Members	**26**	**13**	**11**	**50**	**22**	**10**	**14**	**46**

[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						2
50-54				1	2					3
55-59			1	2						3
60-64				1						1
65-69										
70-74										
75+										
Total	0	0	3	5	2	0	0	0	0	10

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	52
40-44	1	1,279
45-49	1	730
50-54		
55-59	1	2,716
60-64	1	782
65-69	1	11
70-74		
75+		
Total	6	928

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	311
60-64	3	688
65-69	3	190
70-74	2	626
75-79	1	2,547
80-84	1	554
85-89		
90-94		
95-99		
100+		
Total	11	663

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

City of Joseph/2232
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
City of Joseph/2232

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

City of Joseph -- #2232

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Joseph 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 City of Joseph.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Joseph

	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]	4.61%	4.61%	4.61%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**16.86%**	**12.55%**	**16.66%**
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	**17.39%**	**13.00%**	**17.11%**

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 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	16.25%	16.25%
Minimum July 1, 2017 Rate	13.00%	9.75%
Maximum July 1, 2017 Rate	19.50%	22.75%

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	$671,776	$917,100	$245,324	73%	$139,460	176%
12/31/2009	764,563	947,395	182,832	81%	173,248	106%
12/31/2010	820,617	992,526	171,909	83%	187,023	92%
12/31/2011	777,639	1,026,462	248,823	76%	133,837	186%
12/31/2012	855,476	1,025,082	169,606	83%	129,996	130%
12/31/2013	939,351	1,027,048	87,697	91%	141,268	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.

City of Joseph

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	$87,697	$169,606
Allocated pooled OPSRP UAL	9,989	9,162
Side account	0	0
Net unfunded pension actuarial accrued liability	97,686	178,768
Combined valuation payroll	141,268	129,996
Net pension UAL as a percentage of payroll	69%	138%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,955	$2,727

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	$6,204	$6,020
Tier 1/Tier 2 valuation payroll	53,300	52,301
Tier 1/Tier 2 pension normal cost rate	11.64%	11.51%
Tier 1/ Tier 2 Actuarial accrued liability	$1,027,048	$1,025,082
Actuarial asset value	939,351	855,476
Tier 1/Tier 2 Unfunded actuarial accrued liability	87,697	169,606
Tier 1/ Tier 2 Funded status	91%	83%
Combined valuation payroll	$141,268	$129,996
Tier 1/Tier 2 UAL as a percentage of payroll	62%	130%
Tier 1/Tier 2 UAL rate	4.61%	4.74%
(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	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	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	141,268	129,996
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]	$97,715	$89,847
2. Employer reserves	381,594	318,972
3. Benefits in force reserve	460,042	446,657
4. Total market value of assets ***(1. + 2. + 3.)***	**$939,351**	**$855,476**

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	$855,476
2.	Regular employer contributions	11,263
3.	Benefit payments and expense	(71,216)
4.	Adjustments[2]	23,157
5.	Interest credited	120,671
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$939,351**

[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	6,204	6,020
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$6,204**	**$6,020**

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	$6,204	$6,204	$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	160,810	146,904
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$160,810**	**$146,904**
Dormant Members	124,667	125,500
Retired Members and Beneficiaries	741,571	752,678
Total Actuarial Accrued Liability	**$1,027,048**	**$1,025,082**

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	$1,027,048	$1,027,048	$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	$1,027,048	$1,025,082
2. Actuarial value of assets	939,351	855,476
3. Unfunded accrued liability *(1. – 2.)*	87,697	169,606
4. Funded percentage *(2. ÷ 1.)*	91%	83%
5. Combined valuation payroll	$141,268	$129,996
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	62%	130%

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	$87,697	$6,347
Total				**$87,697**	**$6,347**

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	$1,025,082
b. Normal cost at December 31, 2012	6,020
c. Benefit payments during 2013	(70,652)
d. Interest at 7.75% to December 31, 2013	77,173
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,037,623
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.)*	1,037,623
2. Actuarial accrued liability at December 31, 2013	1,027,048
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	10,575
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	855,476
b. Contributions for 2013[1]	11,263
c. Benefit payments and expenses during 2013	(71,216)
d. Interest at 7.75% to December 31, 2013	63,976
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	859,499
5. Actuarial value of assets at December 31, 2013	939,351
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	79,852
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$90,427**

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	**$169,606**
2. Expected increase	8,518
3. Liability (gain)/loss	(10,575)
4. Asset (gain)/loss	(79,852)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$87,697**

[1] *Includes rate relief from side accounts.*

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

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

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost Rate**	**Normal Cost**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost Rate**
Tier 1 Police & Fire	$0	$0	0.00%	$0	$0	0.00%
Tier 1 General Service	6,204	53,300	11.64%	6,020	52,301	11.51%
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	**$6,204**	**$53,300**	**11.64%**	**$6,020**	**$52,301**	**11.51%**

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	$87,697	$169,606
2. Next year's Tier 1/Tier 2 UAL payment	6,347	12,276
3. Combined valuation payroll	141,268	129,996
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	4.49%	9.44%

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	11.64%	11.51%
b. Tier 1/Tier 2 UAL rate	4.49%	9.44%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	16.28%	21.08%

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	13.25%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.25%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.65%
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%)*	10.25%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	16.25%
7. July 1, 2015 total pension rate, before adjustment	16.28%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.03%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	4.49%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	4.46%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	16.25%
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.)*	16.25%

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%	11.51%
b. Tier 1/Tier 2 UAL rate	4.46%	4.61%
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%)*	16.25%	16.25%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$53,300	$0	$53,300
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	53,300	0	53,300
OPSRP valuation payroll	87,968	0	87,968
Combined valuation payroll	**$141,268**	**$0**	**$141,268**

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	3	5	2	0	3	5
Police & Fire	0	0	0	0	0	0	0	0
Total	2	0	3	5	2	0	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	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	4	1	0	5	4	1	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	4	1	0	5	4	1	0	5
Grand Total Number of Members	**7**	**2**	**3**	**12**	**7**	**2**	**3**	**12**

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

Data

Demographic Information (continued)

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

	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					1					**1**
65-69										
70-74										
75+										
Total	**0**	**0**	**0**	**0**	**2**	**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	1	374
35-39		
40-44		
45-49		
50-54		
55-59		
60-64	1	824
65-69		
70-74		
75+		
Total	2	599

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69	1	792
70-74	2	2,328
75-79	1	600
80-84	1	450
85-89		
90-94		
95-99		
100+		
Total	5	1,300

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

City of Keizer/2279
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
City of Keizer/2279

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

City of Keizer -- #2279

September 2014

Secondary Employers

2539 Keizer Water District

CONTENTS

Executive Summary

Milliman has prepared this report for City of Keizer 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 City of Keizer.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Keizer

	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]	(2.20%)	(2.20%)	(2.20%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**13.56%**	**5.74%**	**9.85%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**14.09%**	**6.19%**	**10.30%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

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

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	12.95%	12.95%
Minimum July 1, 2017 Rate	9.95%	6.95%
Maximum July 1, 2017 Rate	15.95%	18.95%

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	$11,704,780	$12,202,765	$497,985	96%	$3,318,225	15%
12/31/2009	13,407,773	13,634,579	226,806	98%	3,677,284	6%
12/31/2010	14,718,129	14,359,732	(358,397)	103%	5,955,156	(6%)
12/31/2011	14,874,482	15,789,873	915,391	94%	5,827,628	16%
12/31/2012	16,637,219	17,416,511	779,292	96%	5,961,984	13%
12/31/2013	18,121,330	18,330,016	208,686	99%	6,014,572	3%

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.

City of Keizer

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$208,686	$779,292
Allocated pooled OPSRP UAL	425,267	420,217
Side account	0	0
Net unfunded pension actuarial accrued liability	633,953	1,199,509
Combined valuation payroll	6,014,572	5,961,984
Net pension UAL as a percentage of payroll	11%	20%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$83,248	$125,085

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	$470,155	$492,092
Tier 1/Tier 2 valuation payroll	3,103,095	3,181,740
Tier 1/Tier 2 pension normal cost rate	15.15%	15.47%
Tier 1/ Tier 2 Actuarial accrued liability	$18,330,016	$17,416,511
Actuarial asset value	18,121,330	16,637,219
Tier 1/Tier 2 Unfunded actuarial accrued liability	208,686	779,292
Tier 1/ Tier 2 Funded status	99%	96%
Combined valuation payroll	$6,014,572	$5,961,984
Tier 1/Tier 2 UAL as a percentage of payroll	3%	13%
Tier 1/Tier 2 UAL rate	(2.20%)	(2.52%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	37	37
Tier 1/Tier 2 dormant members	4	5
Tier 1/Tier 2 retirees and beneficiaries	20	15

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

Executive Summary

Principal Valuation Results (continued)

OPSRP

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

Retiree Healthcare

($ in millions)	Actuarial Valuation as of	
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	6,014,572	5,961,984
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]	$3,213,421	$3,491,682
2. Employer reserves	10,929,144	10,386,217
3. Benefits in force reserve	3,978,766	2,759,320
4. Total market value of assets ***(1. + 2. + 3.)***	**$18,121,330**	**$16,637,219**

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	$16,637,219
2.	Regular employer contributions	189,271
3.	Benefit payments and expense	(615,930)
4.	Adjustments[2]	(433,099)
5.	Interest credited	2,343,869
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$18,121,330**

[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	$294,206	$320,255
Tier 1 General Service	20,121	19,469
Tier 2 Police & Fire	107,062	109,515
Tier 2 General Service	48,766	42,853
Total	**$470,155**	**$492,092**

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	$470,155	$470,155	$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

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

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	**December 31, 2012**
Active Members		
▪ Tier 1 Police & Fire	$8,775,391	$9,383,271
▪ Tier 1 General Service	113,865	88,997
▪ Tier 2 Police & Fire	2,162,257	2,043,312
▪ Tier 2 General Service	411,322	342,899
▪ **Total Active Members**	**$11,462,835**	**$11,858,479**
Dormant Members	453,551	908,197
Retired Members and Beneficiaries	6,413,630	4,649,835
Total Actuarial Accrued Liability	**$18,330,016**	**$17,416,511**

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	$18,330,016	$18,330,016	$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	$18,330,016	$17,416,511
2. Actuarial value of assets	18,121,330	16,637,219
3. Unfunded accrued liability *(1. – 2.)*	208,686	779,292
4. Funded percentage *(2. ÷ 1.)*	99%	96%
5. Combined valuation payroll	$6,014,572	$5,961,984
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	3%	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	$208,686	$15,105
Total				**$208,686**	**$15,105**

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	$17,416,511
b. Normal cost at December 31, 2012	492,092
c. Benefit payments during 2013	(611,044)
d. Interest at 7.75% to December 31, 2013	1,364,239
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	18,661,798
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.)*	18,661,798
2. Actuarial accrued liability at December 31, 2013	18,330,016
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	331,782
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	16,637,219
b. Contributions for 2013[1]	189,271
c. Benefit payments and expenses during 2013	(615,930)
d. Interest at 7.75% to December 31, 2013	1,272,851
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	17,483,411
5. Actuarial value of assets at December 31, 2013	18,121,330
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	637,919
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$969,701**

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	**$779,292**
2. Expected increase	399,095
3. Liability (gain)/loss	(331,782)
4. Asset (gain)/loss	(637,919)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$208,686**

[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	$294,206	$1,661,176	17.71%	$320,255	$1,785,804	17.93%
Tier 1 General Service	20,121	178,248	11.29%	19,469	173,480	11.22%
Tier 2 Police & Fire	107,062	713,016	15.02%	109,515	737,025	14.86%
Tier 2 General Service	48,766	550,655	8.86%	42,853	485,431	8.83%
Total	**$470,155**	**$3,103,095**	**15.15%**	**$492,092**	**$3,181,740**	**15.47%**

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	$208,686	$779,292
2. Next year's Tier 1/Tier 2 UAL payment	15,105	56,405
3. Combined valuation payroll	6,014,572	5,961,984
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.25%	0.95%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.15%	15.47%
b. Tier 1/Tier 2 UAL rate	0.25%	0.95%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	15.55%	16.55%

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	9.95%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	9.95%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.99%
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%)*	6.95%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	12.95%
7. July 1, 2015 total pension rate, before adjustment	15.55%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.60%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	0.25%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(2.35%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	12.95%
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.)*	12.95%

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%	15.47%
b. Tier 1/Tier 2 UAL rate	(2.35%)	(2.65%)
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%)*	12.95%	12.95%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$178,248	$1,661,176	$1,839,424
Tier 2	550,655	713,016	1,263,671
Tier 1/Tier 2 valuation payroll	728,903	2,374,192	3,103,095
OPSRP valuation payroll	2,247,545	663,932	2,911,477
Combined valuation payroll	**$2,976,448**	**$3,038,124**	**$6,014,572**

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	7	39	48	2	6	38	46
Police & Fire	19	9	9	37	20	9	8	37
Total	21	16	48	85	22	15	46	83
Active Members with previous service segments with the employer								
General Service	1	0	N/A	1	0	0	N/A	0
Police & Fire	12	7	N/A	19	4	1	N/A	5
Total	13	7	N/A	20	4	1	N/A	5
Dormant Members								
General Service	0	0	1	1	0	0	0	0
Police & Fire	3	1	0	4	4	1	0	5
Total	3	1	1	5	4	1	0	5
Retired Members and Beneficiaries								
General Service	5	0	1	6	5	0	0	5
Police & Fire	15	0	0	15	10	0	0	10
Total	20	0	1	21	15	0	0	15
Grand Total Number of Members	**57**	**24**	**50**	**131**	**45**	**17**	**46**	**108**

[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	4							**5**
40-44			6	5	2					**13**
45-49			1	4	7					**12**
50-54					3					**3**
55-59		1	1							**2**
60-64	1		1							**2**
65-69										
70-74										
75+										
Total	**1**	**2**	**13**	**9**	**12**	**0**	**0**	**0**	**0**	**37**

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	2	1,176
45-49		
50-54	2	1,240
55-59		
60-64		
65-69		
70-74		
75+		
Total	4	1,208

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	84
45-49		
50-54	2	3,538
55-59	6	1,584
60-64	5	2,723
65-69	3	2,207
70-74	2	1,647
75-79		
80-84		
85-89	1	2,355
90-94		
95-99		
100+		
Total	20	2,127

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

City of Maupin/2283
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
City of Maupin/2283

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

City of Maupin -- #2283

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Maupin 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 City of Maupin.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Maupin

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.42%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(5.96%)	(5.96%)	(5.96%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**9.07%**	**1.98%**	**6.09%**
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	**9.60%**	**2.43%**	**6.54%**

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 111%.

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	8.46%	8.46%
Minimum July 1, 2017 Rate	5.46%	2.46%
Maximum July 1, 2017 Rate	11.46%	14.46%

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	$593,257	$672,812	$79,555	88%	$280,132	28%
12/31/2009	707,555	716,581	9,026	99%	319,315	3%
12/31/2010	787,391	789,323	1,932	100%	331,614	1%
12/31/2011	832,750	878,410	45,660	95%	358,633	13%
12/31/2012	964,281	850,528	(113,753)	113%	330,436	(34%)
12/31/2013	1,015,345	913,105	(102,240)	111%	210,414	(49%)

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.

City of Maupin

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($102,240)	($113,753)
Allocated pooled OPSRP UAL	14,878	23,290
Side account	0	0
Net unfunded pension actuarial accrued liability	(87,362)	(90,463)
Combined valuation payroll	210,414	330,436
Net pension UAL as a percentage of payroll	(42%)	(27%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,912	$6,933

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	$20,805	$28,135
Tier 1/Tier 2 valuation payroll	144,260	217,152
Tier 1/Tier 2 pension normal cost rate	14.42%	12.96%
Tier 1/ Tier 2 Actuarial accrued liability	$913,105	$850,528
Actuarial asset value	1,015,345	964,281
Tier 1/Tier 2 Unfunded actuarial accrued liability	(102,240)	(113,753)
Tier 1/ Tier 2 Funded status	111%	113%
Combined valuation payroll	$210,414	$330,436
Tier 1/Tier 2 UAL as a percentage of payroll	(49%)	(34%)
Tier 1/Tier 2 UAL rate	(5.96%)	(4.50%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	3	4
Tier 1/Tier 2 dormant members	2	1
Tier 1/Tier 2 retirees and beneficiaries	3	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	210,414	330,436
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]	$306,510	$335,542
2. Employer reserves	563,057	623,558
3. Benefits in force reserve	145,778	5,181
4. Total market value of assets *(1. + 2. + 3.)*	**$1,015,345**	**$964,281**

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	$964,281
2.	Regular employer contributions	9,651
3.	Benefit payments and expense	(22,567)
4.	Adjustments[2]	(58,644)
5.	Interest credited	122,624
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,015,345**

[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	20,805	28,135
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$20,805**	**$28,135**

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	$20,805	$20,805	$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	647,093	834,098
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$647,093**	**$834,098**
Dormant Members	31,024	7,699
Retired Members and Beneficiaries	234,988	8,731
Total Actuarial Accrued Liability	**$913,105**	**$850,528**

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	$913,105	$913,105	$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	$913,105	$850,528
2. Actuarial value of assets	1,015,345	964,281
3. Unfunded accrued liability *(1. – 2.)*	(102,240)	(113,753)
4. Funded percentage *(2. ÷ 1.)*	111%	113%
5. Combined valuation payroll	$210,414	$330,436
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(49%)	(34%)

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	($102,240)	($7,400)
Total				**($102,240)**	**($7,400)**

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	$850,528
b. Normal cost at December 31, 2012	28,135
c. Benefit payments during 2013	(22,388)
d. Interest at 7.75% to December 31, 2013	67,229
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	923,504
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.)*	923,504
2. Actuarial accrued liability at December 31, 2013	913,105
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	10,399
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	964,281
b. Contributions for 2013[1]	9,651
c. Benefit payments and expenses during 2013	(22,567)
d. Interest at 7.75% to December 31, 2013	74,231
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,025,596
5. Actuarial value of assets at December 31, 2013	1,015,345
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	(10,251)
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$148**

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	**($113,753)**
2. Expected increase	11,661
3. Liability (gain)/loss	(10,399)
4. Asset (gain)/loss	10,251
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($102,240)**

[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	20,805	144,260	14.42%	28,135	217,152	12.96%
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	**$20,805**	**$144,260**	**14.42%**	**$28,135**	**$217,152**	**12.96%**

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	($102,240)	($113,753)
2. Next year's Tier 1/Tier 2 UAL payment	(7,400)	(8,233)
3. Combined valuation payroll	210,414	330,436
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(3.52%)	(2.49%)

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	14.42%	12.96%
b. Tier 1/Tier 2 UAL rate	(3.52%)	(2.49%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	11.05%	10.60%

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	5.46%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	5.46%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.09%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	111%
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%)*	2.46%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	8.46%
7. July 1, 2015 total pension rate, before adjustment	11.05%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.59%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.52%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(6.11%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.46%
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	14.42%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.42%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	8.46%

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	14.42%	12.96%
b. Tier 1/Tier 2 UAL rate	(6.11%)	(4.63%)
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%)*	8.46%	8.46%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$144,260	$0	$144,260
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	144,260	0	144,260
OPSRP valuation payroll	66,154	0	66,154
Combined valuation payroll	**$210,414**	**$0**	**$210,414**

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	0	2	5	4	0	4	8
Police & Fire	0	0	0	0	0	0	0	0
Total	3	0	2	5	4	0	4	8
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	1	3	0	1	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	1	3	0	1	0	1
Retired Members and Beneficiaries								
General Service	3	0	0	3	2	0	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	3	0	0	3	2	0	0	2
Grand Total Number of Members	**7**	**1**	**3**	**11**	**6**	**1**	**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

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						2				**2**
55-59										
60-64										
65-69										
70-74	1									**1**
75+										
Total	**1**	**0**	**0**	**0**	**0**	**2**	**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	1	0
45-49		
50-54		
55-59		
60-64	1	223
65-69		
70-74		
75+		
Total	2	111

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69	1	1,806
70-74	1	63
75-79	1	18
80-84		
85-89		
90-94		
95-99		
100+		
Total	3	629

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

City of Merrill/2246
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
City of Merrill/2246

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

City of Merrill -- #2246

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Merrill 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 City of Merrill.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Merrill

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	18.27%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(12.80%)	(12.80%)	(12.80%)
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	$287,155	$330,882	$43,727	87%	$12,463	351%
12/31/2009	326,530	289,667	(36,863)	113%	7,631	(483%)
12/31/2010	358,924	319,024	(39,900)	113%	48,700	(82%)
12/31/2011	366,777	352,212	(14,565)	104%	49,748	(29%)
12/31/2012	419,097	360,969	(58,128)	116%	48,798	(119%)
12/31/2013	456,642	366,421	(90,221)	125%	50,431	(179%)

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.

City of Merrill

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($90,221)	($58,128)
Allocated pooled OPSRP UAL	3,566	3,439
Side account	0	0
Net unfunded pension actuarial accrued liability	(86,655)	(54,689)
Combined valuation payroll	50,431	48,798
Net pension UAL as a percentage of payroll	(172%)	(112%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$698	$1,024

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	$8,675	$8,373
Tier 1/Tier 2 valuation payroll	50,431	48,798
Tier 1/Tier 2 pension normal cost rate	18.27%	17.16%
Tier 1/ Tier 2 Actuarial accrued liability	$366,421	$360,969
Actuarial asset value	456,642	419,097
Tier 1/Tier 2 Unfunded actuarial accrued liability	(90,221)	(58,128)
Tier 1/ Tier 2 Funded status	125%	116%
Combined valuation payroll	$50,431	$48,798
Tier 1/Tier 2 UAL as a percentage of payroll	(179%)	(119%)
Tier 1/Tier 2 UAL rate	(12.80%)	(8.75%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	2	1
Tier 1/Tier 2 retirees and beneficiaries	5	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	50,431	48,798
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]	$119,157	$109,437
2. Employer reserves	327,623	280,851
3. Benefits in force reserve	9,862	28,809
4. Total market value of assets ***(1. + 2. + 3.)***	**$456,642**	**$419,097**

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	$419,097
2.	Regular employer contributions	2,627
3.	Benefit payments and expense	(1,527)
4.	Adjustments [2]	(18,037)
5.	Interest credited	54,482
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$456,642**

[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	$8,675	$8,373
Tier 1 General Service	0	0
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$8,675**	**$8,373**

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	$8,675	$8,675	$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	$61,398	$48,815
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	3,680
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$61,398**	**$52,495**
Dormant Members	289,126	259,926
Retired Members and Beneficiaries	15,897	48,548
Total Actuarial Accrued Liability	**$366,421**	**$360,969**

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	$366,421	$366,421	$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	$366,421	$360,969
2. Actuarial value of assets	456,642	419,097
3. Unfunded accrued liability *(1. – 2.)*	(90,221)	(58,128)
4. Funded percentage *(2. ÷ 1.)*	125%	116%
5. Combined valuation payroll	$50,431	$48,798
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(179%)	(119%)

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	($90,221)	($6,530)
Total				**($90,221)**	**($6,530)**

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	$360,969
b. Normal cost at December 31, 2012	8,373
c. Benefit payments during 2013	(1,515)
d. Interest at 7.75% to December 31, 2013	28,565
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	396,392
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.)*	396,392
2. Actuarial accrued liability at December 31, 2013	366,421
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	29,971
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	419,097
b. Contributions for 2013[1]	2,627
c. Benefit payments and expenses during 2013	(1,527)
d. Interest at 7.75% to December 31, 2013	32,523
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	452,720
5. Actuarial value of assets at December 31, 2013	456,642
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	3,922
7. Total actuarial gain/(loss) *(3. + 6.)*	**$33,893**

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	**($58,128)**
2. Expected increase	1,800
3. Liability (gain)/loss	(29,971)
4. Asset (gain)/loss	(3,922)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($90,221)**

[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	$8,675	$50,431	17.20%	$8,373	$48,798	17.16%
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	**$8,675**	**$50,431**	**17.20%**	**$8,373**	**$48,798**	**17.16%**

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	($90,221)	($58,128)
2. Next year's Tier 1/Tier 2 UAL payment	(6,530)	(4,207)
3. Combined valuation payroll	50,431	48,798
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(12.95%)	(8.62%)

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	17.20%	17.16%
b. Tier 1/Tier 2 UAL rate	(12.95%)	(8.62%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	4.40%	8.67%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

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

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

1. Current net Tier 1/Tier 2 pension contribution rate	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	4.40%
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	(12.95%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(12.95%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	4.40%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	1.07%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	17.20%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	18.27%
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	18.27%	17.16%
b. Tier 1/Tier 2 UAL rate	(12.95%)	(8.88%)
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	$0	$50,431	$50,431
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	0	50,431	50,431
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$0**	**$50,431**	**$50,431**

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	1	N/A	1
Total	0	0	N/A	0	0	1	N/A	1
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	1	1	1	3	1	0	1	2
Total	1	1	1	3	1	0	1	2
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	5	0	0	5	4	2	0	6
Total	5	0	0	5	4	2	0	6
Grand Total Number of Members	**7**	**1**	**1**	**9**	**6**	**3**	**1**	**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										
50-54				1						**1**
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	2	941
60-64		
65-69		
70-74		
75+		
Total	2	941

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	2	15
65-69		
70-74	1	9
75-79		
80-84		
85-89	2	81
90-94		
95-99		
100+		
Total	5	40

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

City of Metolius/2195
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
City of Metolius/2195

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

City of Metolius -- #2195

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Metolius 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 City of Metolius.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Metolius

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.61%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(12.14%)	(12.14%)	(12.14%)
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 216%.

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	$477,812	$357,040	($120,772)	134%	$97,627	(124%)
12/31/2009	567,870	372,882	(194,988)	152%	108,522	(180%)
12/31/2010	627,697	395,551	(232,146)	159%	98,739	(235%)
12/31/2011	560,285	312,071	(248,214)	180%	106,200	(234%)
12/31/2012	630,653	318,594	(312,059)	198%	98,438	(317%)
12/31/2013	709,536	329,020	(380,516)	216%	99,708	(382%)

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.

City of Metolius

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($380,516)	($312,059)
Allocated pooled OPSRP UAL	7,050	6,938
Side account	0	0
Net unfunded pension actuarial accrued liability	(373,466)	(305,121)
Combined valuation payroll	99,708	98,438
Net pension UAL as a percentage of payroll	(375%)	(310%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,380	$2,065

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	$7,482	$7,218
Tier 1/Tier 2 valuation payroll	61,648	60,731
Tier 1/Tier 2 pension normal cost rate	17.61%	17.33%
Tier 1/ Tier 2 Actuarial accrued liability	$329,020	$318,594
Actuarial asset value	709,536	630,653
Tier 1/Tier 2 Unfunded actuarial accrued liability	(380,516)	(312,059)
Tier 1/ Tier 2 Funded status	216%	198%
Combined valuation payroll	$99,708	$98,438
Tier 1/Tier 2 UAL as a percentage of payroll	(382%)	(317%)
Tier 1/Tier 2 UAL rate	(12.14%)	(11.89%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	2	2
Tier 1/Tier 2 dormant members	4	5
Tier 1/Tier 2 retirees and beneficiaries	4	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	99,708	98,438
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]	$74,099	$66,982
2. Employer reserves	555,059	479,767
3. Benefits in force reserve	80,379	83,904
4. Total market value of assets *(1. + 2. + 3.)*	**$709,536**	**$630,653**

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	$630,653
2. Regular employer contributions	517
3. Benefit payments and expense	(12,443)
4. Adjustments[2]	(1,559)
5. Interest credited	92,369
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$709,536**

[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	4,223	4,112
Tier 2 Police & Fire	0	0
Tier 2 General Service	3,259	3,106
Total	**$7,482**	**$7,218**

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	$7,482	$7,482	$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	$199	$186
▪ Tier 1 General Service	113,784	98,863
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	67,520	61,588
▪ **Total Active Members**	**$181,503**	**$160,637**
Dormant Members	17,949	16,566
Retired Members and Beneficiaries	129,568	141,391
Total Actuarial Accrued Liability	**$329,020**	**$318,594**

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	$329,020	$329,020	$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	$329,020	$318,594
2. Actuarial value of assets	709,536	630,653
3. Unfunded accrued liability *(1. – 2.)*	(380,516)	(312,059)
4. Funded percentage *(2. ÷ 1.)*	216%	198%
5. Combined valuation payroll	$99,708	$98,438
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(382%)	(317%)

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	($380,516)	($27,542)
Total				**($380,516)**	**($27,542)**

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	$318,594
b. Normal cost at December 31, 2012	7,218
c. Benefit payments during 2013	(12,344)
d. Interest at 7.75% to December 31, 2013	24,772
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	338,240
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.)*	338,240
2. Actuarial accrued liability at December 31, 2013	329,020
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	9,220
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	630,653
b. Contributions for 2013[1]	517
c. Benefit payments and expenses during 2013	(12,443)
d. Interest at 7.75% to December 31, 2013	48,413
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	667,140
5. Actuarial value of assets at December 31, 2013	709,536
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	42,396
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$51,616**

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	**($312,059)**
2. Expected increase	(16,841)
3. Liability (gain)/loss	(9,220)
4. Asset (gain)/loss	(42,396)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($380,516)**

[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	4,223	37,287	11.33%	4,112	36,828	11.17%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	3,259	24,361	13.38%	3,106	23,903	12.99%
Total	**$7,482**	**$61,648**	**12.14%**	**$7,218**	**$60,731**	**11.89%**

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	($380,516)	($312,059)
2. Next year's Tier 1/Tier 2 UAL payment	(27,542)	(22,587)
3. Combined valuation payroll	99,708	98,438
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(27.62%)	(22.95%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.14%	11.89%
b. Tier 1/Tier 2 UAL rate	(27.62%)	(22.95%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	(15.33%)	(10.93%)

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	216%
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	(15.33%)
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	15.33%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(27.62%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(12.29%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	0.00%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	5.47%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	12.14%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.61%
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	17.61%	17.33%
b. Tier 1/Tier 2 UAL rate	(12.29%)	(12.02%)
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%)*	5.47%	5.44%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$37,287	$0	$37,287
Tier 2	24,361	0	24,361
Tier 1/Tier 2 valuation payroll	61,648	0	61,648
OPSRP valuation payroll	38,060	0	38,060
Combined valuation payroll	**$99,708**	**$0**	**$99,708**

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	1	3	1	1	1	3
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	1	3	1	1	1	3
Active Members with previous service segments with the employer								
General Service	2	0	N/A	2	1	0	N/A	1
Police & Fire	1	0	N/A	1	0	0	N/A	0
Total	3	0	N/A	3	1	0	N/A	1
Dormant Members								
General Service	1	1	0	2	1	2	0	3
Police & Fire	2	0	0	2	2	0	0	2
Total	3	1	0	4	3	2	0	5
Retired Members and Beneficiaries								
General Service	1	0	0	1	1	0	0	1
Police & Fire	2	1	0	3	2	1	0	3
Total	3	1	0	4	3	1	0	4
Grand Total Number of Members	**10**	**3**	**1**	**14**	**8**	**4**	**1**	**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
65-69										
70-74										
75+										
Total	0	0	0	2	0	0	0	0	0	2

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

Dormant Members

Age	Count	Average Deferred Monthly Benefit
<20		
20-24		
25-29		
30-34		
35-39		
40-44		
45-49	1	20
50-54		
55-59		
60-64	1	1,101
65-69		
70-74	1	158
75+	1	82
Total	4	340

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	2
60-64	1	3
65-69		
70-74	2	549
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	4	276

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

City of Molalla/2290
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
City of Molalla/2290

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

City of Molalla -- #2290

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Molalla 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 City of Molalla.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Molalla

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.39%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(3.97%)	(3.97%)	(3.97%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**11.03%**	**3.97%**	**8.08%**
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	**11.56%**	**4.42%**	**8.53%**

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

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

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	10.42%	10.42%
Minimum July 1, 2017 Rate	7.42%	4.42%
Maximum July 1, 2017 Rate	13.42%	16.42%

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	$8,945,436	$9,554,948	$609,512	94%	$2,305,653	26%
12/31/2009	10,301,439	10,259,527	(41,912)	100%	2,398,909	(2%)
12/31/2010	11,077,946	11,043,166	(34,780)	100%	2,775,435	(1%)
12/31/2011	11,117,542	11,296,702	179,160	98%	2,470,181	7%
12/31/2012	12,478,336	11,761,394	(716,942)	106%	2,512,747	(29%)
12/31/2013	13,875,421	12,370,284	(1,505,137)	112%	2,645,923	(57%)

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.

City of Molalla

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($1,505,137)	($716,942)
Allocated pooled OPSRP UAL	187,083	177,105
Side account	0	0
Net unfunded pension actuarial accrued liability	(1,318,054)	(539,837)
Combined valuation payroll	2,645,923	2,512,747
Net pension UAL as a percentage of payroll	(50%)	(21%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$36,622	$52,719

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	$215,259	$201,852
Tier 1/Tier 2 valuation payroll	1,495,841	1,410,476
Tier 1/Tier 2 pension normal cost rate	14.39%	14.31%
Tier 1/ Tier 2 Actuarial accrued liability	$12,370,284	$11,761,394
Actuarial asset value	13,875,421	12,478,336
Tier 1/Tier 2 Unfunded actuarial accrued liability	(1,505,137)	(716,942)
Tier 1/ Tier 2 Funded status	112%	106%
Combined valuation payroll	$2,645,923	$2,512,747
Tier 1/Tier 2 UAL as a percentage of payroll	(57%)	(29%)
Tier 1/Tier 2 UAL rate	(3.97%)	(3.41%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	20	19
Tier 1/Tier 2 dormant members	19	19
Tier 1/Tier 2 retirees and beneficiaries	33	32

[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	2,645,923	2,512,747
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]	$2,505,559	$2,536,242
2. Employer reserves	8,453,171	7,507,323
3. Benefits in force reserve	2,916,691	2,434,772
4. Total market value of assets *(1. + 2. + 3.)*	**$13,875,421**	**$12,478,336**

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	$12,478,336
2. Regular employer contributions	94,583
3. Benefit payments and expense	(451,516)
4. Adjustments[2]	(7,679)
5. Interest credited	1,761,697
6. Total transferred from side accounts	0
7. Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)*	**$13,875,421**

[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	$19,922	$34,749
Tier 1 General Service	69,353	55,344
Tier 2 Police & Fire	79,777	73,816
Tier 2 General Service	46,207	37,943
Total	**$215,259**	**$201,852**

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	$215,259	$215,259	$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	$844,583	$1,207,250
▪ Tier 1 General Service	2,379,115	2,196,733
▪ Tier 2 Police & Fire	1,493,634	1,264,289
▪ Tier 2 General Service	876,865	742,476
▪ **Total Active Members**	**$5,594,197**	**$5,410,748**
Dormant Members	2,074,485	2,247,719
Retired Members and Beneficiaries	4,701,602	4,102,927
Total Actuarial Accrued Liability	**$12,370,284**	**$11,761,394**

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

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

	Before Changes	**After Changes**	**Net Change**
Actuarial Accrued Liability	$12,370,284	$12,370,284	$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

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

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	$12,370,284	$11,761,394
2. Actuarial value of assets	13,875,421	12,478,336
3. Unfunded accrued liability *(1. – 2.)*	(1,505,137)	(716,942)
4. Funded percentage *(2. ÷ 1.)*	112%	106%
5. Combined valuation payroll	$2,645,923	$2,512,747
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(57%)	(29%)

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	($1,505,137)	($108,942)
Total				**($1,505,137)**	**($108,942)**

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	$11,761,394
b. Normal cost at December 31, 2012	201,852
c. Benefit payments during 2013	(447,935)
d. Interest at 7.75% to December 31, 2013	909,794
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	12,425,105
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 *(e. + f.)*	12,425,105
2. Actuarial accrued liability at December 31, 2013	12,370,284
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	54,821
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	12,478,336
b. Contributions for 2013[1]	94,583
c. Benefit payments and expenses during 2013	(451,516)
d. Interest at 7.75% to December 31, 2013	953,240
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	13,074,643
5. Actuarial value of assets at December 31, 2013	13,875,421
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	800,778
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$855,599**

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	**($716,942)**
2. Expected increase	67,404
3. Liability (gain)/loss	(54,821)
4. Asset (gain)/loss	(800,778)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($1,505,137)**

[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	$19,922	$90,868	21.92%	$34,749	$190,059	18.28%
Tier 1 General Service	69,353	382,545	18.13%	55,344	278,159	19.90%
Tier 2 Police & Fire	79,777	587,173	13.59%	73,816	542,938	13.60%
Tier 2 General Service	46,207	435,255	10.62%	37,943	399,320	9.50%
Total	**$215,259**	**$1,495,841**	**14.39%**	**$201,852**	**$1,410,476**	**14.31%**

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	($1,505,137)	($716,942)
2. Next year's Tier 1/Tier 2 UAL payment	(108,942)	(51,892)
3. Combined valuation payroll	2,645,923	2,512,747
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(4.12%)	(2.07%)

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	14.39%	14.31%
b. Tier 1/Tier 2 UAL rate	(4.12%)	(2.07%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	10.42%	12.37%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

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

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

1. Current net Tier 1/Tier 2 pension contribution rate	7.90%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	7.90%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.58%
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%)*	4.90%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	10.90%
7. July 1, 2015 total pension rate, before adjustment	10.42%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(4.12%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(4.12%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	10.42%
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	14.39%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.39%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	10.42%

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	14.39%	14.31%
b. Tier 1/Tier 2 UAL rate	(4.12%)	(3.54%)
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%)*	10.42%	10.90%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$382,545	$90,868	$473,413
Tier 2	435,255	587,173	1,022,428
Tier 1/Tier 2 valuation payroll	817,800	678,041	1,495,841
OPSRP valuation payroll	846,015	304,067	1,150,082
Combined valuation payroll	**$1,663,815**	**$982,108**	**$2,645,923**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	5	8	22	35	4	7	33	44
Police & Fire	1	6	4	11	2	6	3	11
Total	6	14	26	46	6	13	36	55
Active Members with previous service segments with the employer								
General Service	7	1	N/A	8	3	1	N/A	4
Police & Fire	2	2	N/A	4	1	0	N/A	1
Total	9	3	N/A	12	4	1	N/A	5
Dormant Members								
General Service	7	8	4	19	8	8	4	20
Police & Fire	4	0	0	4	3	0	0	3
Total	11	8	4	23	11	8	4	23
Retired Members and Beneficiaries								
General Service	18	6	0	24	17	6	0	23
Police & Fire	6	3	0	9	4	5	0	9
Total	24	9	0	33	21	11	0	32
Grand Total Number of Members	**50**	**34**	**30**	**114**	**42**	**33**	**40**	**115**

[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			3							**3**
40-44			4	2						**6**
45-49										
50-54			1	1		1	1			**4**
55-59			2		1	1				**4**
60-64			1					1		**2**
65-69				1						**1**
70-74										
75+										
Total	**0**	**0**	**11**	**4**	**1**	**2**	**1**	**1**	**0**	**20**

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	3
30-34		
35-39	1	54
40-44	2	585
45-49	5	1,631
50-54	4	2,037
55-59	3	1,314
60-64	3	214
65-69		
70-74		
75+		
Total	19	1,164

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	4	991
60-64	4	1,120
65-69	14	1,037
70-74	7	1,065
75-79	3	884
80-84	1	1,220
85-89		
90-94		
95-99		
100+		
Total	33	1,039

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

City of Mt Angel/2174
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
City of Mt Angel/2174

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

City of Mt Angel -- #2174

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Mt Angel 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 City of Mt Angel.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Mt Angel

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.73%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(3.19%)	(3.19%)	(3.19%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**10.15%**	**4.75%**	**8.86%**
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	**10.68%**	**5.20%**	**9.31%**

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	9.54%	9.54%
Minimum July 1, 2017 Rate	6.54%	3.54%
Maximum July 1, 2017 Rate	12.54%	15.54%

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	$3,684,050	$4,162,510	$478,460	89%	$818,818	58%
12/31/2009	3,759,794	3,886,213	126,419	97%	715,310	18%
12/31/2010	4,098,119	3,915,133	(182,986)	105%	634,125	(29%)
12/31/2011	4,075,365	4,266,957	191,592	96%	814,389	24%
12/31/2012	4,514,828	4,265,668	(249,160)	106%	895,751	(28%)
12/31/2013	4,963,410	4,530,814	(432,596)	110%	938,325	(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.

City of Mt Angel

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($432,596)	($249,160)
Allocated pooled OPSRP UAL	66,345	63,135
Side account	0	0
Net unfunded pension actuarial accrued liability	(366,251)	(186,025)
Combined valuation payroll	938,325	895,751
Net pension UAL as a percentage of payroll	(39%)	(21%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,987	$18,793

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	$65,958	$76,271
Tier 1/Tier 2 valuation payroll	517,988	532,230
Tier 1/Tier 2 pension normal cost rate	12.73%	14.33%
Tier 1/ Tier 2 Actuarial accrued liability	$4,530,814	$4,265,668
Actuarial asset value	4,963,410	4,514,828
Tier 1/Tier 2 Unfunded actuarial accrued liability	(432,596)	(249,160)
Tier 1/ Tier 2 Funded status	110%	106%
Combined valuation payroll	$938,325	$895,751
Tier 1/Tier 2 UAL as a percentage of payroll	(46%)	(28%)
Tier 1/Tier 2 UAL rate	(3.19%)	(3.72%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	7	10
Tier 1/Tier 2 dormant members	23	20
Tier 1/Tier 2 retirees and beneficiaries	55	48

[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	938,325	895,751
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]	$838,762	$820,466
2. Employer reserves	2,751,804	2,521,960
3. Benefits in force reserve	1,372,844	1,172,402
4. Total market value of assets ***(1. + 2. + 3.)***	**$4,963,410**	**$4,514,828**

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	$4,514,828
2.	Regular employer contributions	31,437
3.	Benefit payments and expense	(212,522)
4.	Adjustments[2]	(10,067)
5.	Interest credited	639,735
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$4,963,410**

[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	$241	$212
Tier 1 General Service	26,366	39,787
Tier 2 Police & Fire	11,904	11,182
Tier 2 General Service	27,447	25,090
Total	**$65,958**	**$76,271**

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	$65,958	$65,958	$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	$458,092	$566,495
▪ Tier 1 General Service	737,223	654,757
▪ Tier 2 Police & Fire	413,559	368,584
▪ Tier 2 General Service	437,179	464,443
▪ **Total Active Members**	**$2,046,053**	**$2,054,279**
Dormant Members	271,785	235,730
Retired Members and Beneficiaries	2,212,976	1,975,659
Total Actuarial Accrued Liability	**$4,530,814**	**$4,265,668**

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	$4,530,814	$4,530,814	$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	$4,530,814	$4,265,668
2. Actuarial value of assets	4,963,410	4,514,828
3. Unfunded accrued liability *(1. – 2.)*	(432,596)	(249,160)
4. Funded percentage *(2. ÷ 1.)*	110%	106%
5. Combined valuation payroll	$938,325	$895,751
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(46%)	(28%)

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	($432,596)	($31,311)
Total				**($432,596)**	**($31,311)**

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	$4,265,668
b. Normal cost at December 31, 2012	76,271
c. Benefit payments during 2013	(210,836)
d. Interest at 7.75% to December 31, 2013	328,330
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	4,459,433
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 *(e. + f.)*	4,459,433
2. Actuarial accrued liability at December 31, 2013	4,530,814
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(71,381)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	4,514,828
b. Contributions for 2013[1]	31,437
c. Benefit payments and expenses during 2013	(212,522)
d. Interest at 7.75% to December 31, 2013	342,882
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	4,676,625
5. Actuarial value of assets at December 31, 2013	4,963,410
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	286,786
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$215,405**

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	**($249,160)**
2. Expected increase	31,969
3. Liability (gain)/loss	71,381
4. Asset (gain)/loss	(286,786)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($432,596)**

[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	$241	$1,361	17.71%	$212	$1,242	17.07%
Tier 1 General Service	26,366	178,645	14.76%	39,787	236,294	16.84%
Tier 2 Police & Fire	11,904	75,742	15.72%	11,182	71,419	15.66%
Tier 2 General Service	27,447	262,240	10.47%	25,090	223,275	11.24%
Total	**$65,958**	**$517,988**	**12.73%**	**$76,271**	**$532,230**	**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	($432,596)	($249,160)
2. Next year's Tier 1/Tier 2 UAL payment	(31,311)	(18,034)
3. Combined valuation payroll	938,325	895,751
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(3.34%)	(2.01%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	12.73%	14.33%
b. Tier 1/Tier 2 UAL rate	(3.34%)	(2.01%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.54%	12.45%

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	7.61%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	7.61%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.52%
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%)*	4.61%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	10.61%
7. July 1, 2015 total pension rate, before adjustment	9.54%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.34%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.34%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.54%
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	12.73%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.73%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.54%

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	12.73%	14.33%
b. Tier 1/Tier 2 UAL rate	(3.34%)	(3.85%)
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%)*	9.54%	10.61%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$178,645	$1,361	$180,006
Tier 2	262,240	75,742	337,982
Tier 1/Tier 2 valuation payroll	440,885	77,103	517,988
OPSRP valuation payroll	145,960	274,377	420,337
Combined valuation payroll	**$586,845**	**$351,480**	**$938,325**

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	3	6	12	5	4	5	14
Police & Fire	0	1	6	7	0	1	5	6
Total	3	4	12	19	5	5	10	20
Active Members with previous service segments with the employer								
General Service	12	13	N/A	25	9	8	N/A	17
Police & Fire	32	39	N/A	71	20	28	N/A	48
Total	44	52	N/A	96	29	36	N/A	65
Dormant Members								
General Service	7	3	3	13	7	3	0	10
Police & Fire	10	3	1	14	7	3	0	10
Total	17	6	4	27	14	6	0	20
Retired Members and Beneficiaries								
General Service	18	1	0	19	14	1	0	15
Police & Fire	33	3	0	36	29	4	0	33
Total	51	4	0	55	43	5	0	48
Grand Total Number of Members	**115**	**66**	**16**	**197**	**91**	**52**	**10**	**153**

[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			1							1
45-49										
50-54			1							1
55-59			1							1
60-64						1				1
65-69				1	1					2
70-74										
75+										
Total	0	0	3	2	1	1	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	1	0
40-44	2	114
45-49	5	10
50-54	7	136
55-59	5	168
60-64		
65-69	2	960
70-74		
75+	1	541
Total	23	197

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	4	1
45-49		
50-54	4	4
55-59	13	214
60-64	8	71
65-69	12	491
70-74	7	456
75-79	5	358
80-84	2	1,347
85-89		
90-94		
95-99		
100+		
Total	55	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

City of Ontario/2118
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
City of Ontario/2118

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

City of Ontario -- #2118

September 2014

Secondary Employers

2762 Ontario Rural Fire Protection District

CONTENTS

Executive Summary

Milliman has prepared this report for City of Ontario 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 City of Ontario.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Ontario

	Payroll		
		OPSRP	
	Tier 1/Tier 2	**General Service**	**Police & Fire**
Pension			
Normal cost rate	15.05%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	6.50%	6.50%	6.50%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**22.16%**	**14.44%**	**18.55%**
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	**22.69%**	**14.89%**	**19.00%**

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

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

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	21.55%	21.55%
Minimum July 1, 2017 Rate	17.24%	12.93%
Maximum July 1, 2017 Rate	25.86%	30.17%

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	$23,170,974	$32,216,417	$9,045,443	72%	$4,399,612	206%
12/31/2009	25,814,910	33,286,524	7,471,614	78%	4,650,789	161%
12/31/2010	27,876,104	34,747,117	6,871,013	80%	4,869,659	141%
12/31/2011	27,279,942	36,378,159	9,098,217	75%	4,606,302	198%
12/31/2012	30,253,320	36,203,427	5,950,107	84%	4,494,055	132%
12/31/2013	32,785,346	37,071,655	4,286,309	88%	4,270,487	100%

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.

City of Ontario

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$4,286,309	$5,950,107
Allocated pooled OPSRP UAL	301,949	316,753
Side account	0	0
Net unfunded pension actuarial accrued liability	4,588,258	6,266,860
Combined valuation payroll	4,270,487	4,494,055
Net pension UAL as a percentage of payroll	107%	139%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$59,108	$94,287

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	$427,140	$460,083
Tier 1/Tier 2 valuation payroll	2,837,728	3,105,423
Tier 1/Tier 2 pension normal cost rate	15.05%	14.82%
Tier 1/ Tier 2 Actuarial accrued liability	$37,071,655	$36,203,427
Actuarial asset value	32,785,346	30,253,320
Tier 1/Tier 2 Unfunded actuarial accrued liability	4,286,309	5,950,107
Tier 1/ Tier 2 Funded status	88%	84%
Combined valuation payroll	$4,270,487	$4,494,055
Tier 1/Tier 2 UAL as a percentage of payroll	100%	132%
Tier 1/Tier 2 UAL rate	6.50%	6.73%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	48	53
Tier 1/Tier 2 dormant members	36	39
Tier 1/Tier 2 retirees and beneficiaries	101	96

[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	4,270,487	4,494,055
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]	$4,901,876	$5,198,099
2. Employer reserves	13,977,681	12,453,688
3. Benefits in force reserve	13,905,789	12,601,533
4. Total market value of assets ***(1. + 2. + 3.)***	**$32,785,346**	**$30,253,320**

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

Reconciliation of Tier 1/Tier 2 Pension Assets

		December 31, 2012 to December 31, 2013
1.	Market value of assets at beginning of year	$30,253,320
2.	Regular employer contributions	553,723
3.	Benefit payments and expense	(2,152,675)
4.	Adjustments [2]	(87,173)
5.	Interest credited	4,218,151
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$32,785,346**

[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	$162,794	$172,791
Tier 1 General Service	79,384	93,095
Tier 2 Police & Fire	102,567	106,786
Tier 2 General Service	82,395	87,411
Total	**$427,140**	**$460,083**

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	$427,140	$427,140	$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	$5,870,058	$5,861,599
▪ Tier 1 General Service	2,996,370	3,248,003
▪ Tier 2 Police & Fire	1,511,509	1,314,116
▪ Tier 2 General Service	1,640,165	1,501,546
▪ **Total Active Members**	**$12,018,102**	**$11,925,264**
Dormant Members	2,637,909	3,042,840
Retired Members and Beneficiaries	22,415,644	21,235,323
Total Actuarial Accrued Liability	**$37,071,655**	**$36,203,427**

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	$37,071,655	$37,071,655	$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	$37,071,655	$36,203,427
2. Actuarial value of assets	32,785,346	30,253,320
3. Unfunded accrued liability *(1. – 2.)*	4,286,309	5,950,107
4. Funded percentage *(2. ÷ 1.)*	88%	84%
5. Combined valuation payroll	$4,270,487	$4,494,055
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	100%	132%

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	$4,286,309	$310,242
Total				**$4,286,309**	**$310,242**

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	$36,203,427
b. Normal cost at December 31, 2012	460,083
c. Benefit payments during 2013	(2,135,600)
d. Interest at 7.75% to December 31, 2013	2,758,668
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	37,286,578
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.)*	37,286,578
2. Actuarial accrued liability at December 31, 2013	37,071,655
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	214,923
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	30,253,320
b. Contributions for 2013[1]	553,723
c. Benefit payments and expenses during 2013	(2,152,675)
d. Interest at 7.75% to December 31, 2013	2,282,673
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	30,937,041
5. Actuarial value of assets at December 31, 2013	32,785,346
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	1,848,305
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$2,063,228**

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	**$5,950,107**
2. Expected increase	399,430
3. Liability (gain)/loss	(214,923)
4. Asset (gain)/loss	(1,848,305)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$4,286,309**

[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	$162,794	$950,662	17.12%	$172,791	$1,020,616	16.93%
Tier 1 General Service	79,384	454,397	17.47%	93,095	564,521	16.49%
Tier 2 Police & Fire	102,567	664,190	15.44%	106,786	697,816	15.30%
Tier 2 General Service	82,395	768,479	10.72%	87,411	822,470	10.63%
Total	**$427,140**	**$2,837,728**	**15.05%**	**$460,083**	**$3,105,423**	**14.82%**

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	$4,286,309	$5,950,107
2. Next year's Tier 1/Tier 2 UAL payment	310,242	430,668
3. Combined valuation payroll	4,270,487	4,494,055
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	7.26%	9.58%

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	15.05%	14.82%
b. Tier 1/Tier 2 UAL rate	7.26%	9.58%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	22.46%	24.53%

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	17.96%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	17.96%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.59%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.59%
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.)*	3.59%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	14.37%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	21.55%
7. July 1, 2015 total pension rate, before adjustment	22.46%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.91%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	7.26%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	6.35%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	21.55%
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	15.05%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.05%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	21.55%

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	15.05%	14.82%
b. Tier 1/Tier 2 UAL rate	6.35%	6.60%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	21.55%	21.55%
(a. + b. + c., minimum of 5.47%)		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$454,397	$950,662	$1,405,059
Tier 2	768,479	664,190	1,432,669
Tier 1/Tier 2 valuation payroll	1,222,876	1,614,852	2,837,728
OPSRP valuation payroll	992,430	440,329	1,432,759
Combined valuation payroll	**$2,215,306**	**$2,055,181**	**$4,270,487**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	9	16	23	48	10	18	22	50
Police & Fire	13	10	8	31	14	11	8	33
Total	22	26	31	79	24	29	30	83
Active Members with previous service segments with the employer								
General Service	17	6	N/A	23	13	4	N/A	17
Police & Fire	11	7	N/A	18	7	0	N/A	7
Total	28	13	N/A	41	20	4	N/A	24
Dormant Members								
General Service	16	15	3	34	18	15	3	36
Police & Fire	3	2	1	6	3	3	1	7
Total	19	17	4	40	21	18	4	43
Retired Members and Beneficiaries								
General Service	68	5	1	74	63	6	1	70
Police & Fire	27	1	0	28	26	1	0	27
Total	95	6	1	102	89	7	1	97
Grand Total Number of Members	**164**	**62**	**36**	**262**	**154**	**58**	**35**	**247**

[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			3	1						**4**
40-44			4	4						**8**
45-49			1	4	4	3				**12**
50-54			3	3	3	1				**10**
55-59			3	4						**7**
60-64		1	1		1	1		1		**5**
65-69				1						**1**
70-74										
75+										
Total	**0**	**1**	**16**	**17**	**8**	**5**	**0**	**1**	**0**	**48**

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	8	953
45-49	6	1,394
50-54	6	763
55-59	11	690
60-64	2	697
65-69	2	236
70-74		
75+	1	318
Total	36	843

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49	1	19
50-54	3	716
55-59	9	2,648
60-64	22	1,592
65-69	26	1,712
70-74	13	1,934
75-79	15	1,369
80-84	5	1,701
85-89	6	764
90-94	1	338
95-99		
100+		
Total	101	1,630

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

City of Powers/2215
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
City of Powers/2215

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

City of Powers -- #2215

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Powers 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 City of Powers.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Powers

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	18.30%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(12.83%)	(12.83%)	(12.83%)
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 285%.

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	$63,327	$39,247	($24,080)	161%	$38,835	(62%)
12/31/2009	87,332	38,915	(48,417)	224%	39,539	(122%)
12/31/2010	102,721	45,009	(57,712)	228%	40,511	(142%)
12/31/2011	106,075	52,769	(53,306)	201%	65,891	(81%)
12/31/2012	121,512	51,982	(69,530)	234%	45,124	(154%)
12/31/2013	134,165	47,018	(87,147)	285%	48,604	(179%)

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.

City of Powers

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($87,147)	($69,530)
Allocated pooled OPSRP UAL	3,437	3,180
Side account	0	0
Net unfunded pension actuarial accrued liability	(83,710)	(66,350)
Combined valuation payroll	48,604	45,124
Net pension UAL as a percentage of payroll	(172%)	(147%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$673	$947

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	18.30%	16.46%
Tier 1/ Tier 2 Actuarial accrued liability	$47,018	$51,982
Actuarial asset value	134,165	121,512
Tier 1/Tier 2 Unfunded actuarial accrued liability	(87,147)	(69,530)
Tier 1/ Tier 2 Funded status	285%	234%
Combined valuation payroll	$48,604	$45,124
Tier 1/Tier 2 UAL as a percentage of payroll	(179%)	(154%)
Tier 1/Tier 2 UAL rate	(12.83%)	(11.02%)
(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	4	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	48,604	45,124
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]	$2,891	$2,662
2. Employer reserves	110,961	96,014
3. Benefits in force reserve	20,313	22,836
4. Total market value of assets ***(1. + 2. + 3.)***	**$134,165**	**$121,512**

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	$121,512
2. Regular employer contributions	23
3. Benefit payments and expense	(3,144)
4. Adjustments [2]	(2,161)
5. Interest credited	17,935
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$134,165**

[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	$6,862	$6,645
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$6,862**	**$6,645**
Dormant Members	7,413	6,856
Retired Members and Beneficiaries	32,743	38,481
Total Actuarial Accrued Liability	**$47,018**	**$51,982**

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	$47,018	$47,018	$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	$47,018	$51,982
2. Actuarial value of assets	134,165	121,512
3. Unfunded accrued liability *(1. – 2.)*	(87,147)	(69,530)
4. Funded percentage *(2. ÷ 1.)*	285%	234%
5. Combined valuation payroll	$48,604	$45,124
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(179%)	(154%)

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	($87,147)	($6,308)
Total				**($87,147)**	**($6,308)**

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	$51,982
b. Normal cost at December 31, 2012	0
c. Benefit payments during 2013	(3,120)
d. Interest at 7.75% to December 31, 2013	3,908
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	52,770
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.)*	52,770
2. Actuarial accrued liability at December 31, 2013	47,018
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	5,752
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	121,512
b. Contributions for 2013[1]	23
c. Benefit payments and expenses during 2013	(3,144)
d. Interest at 7.75% to December 31, 2013	9,296
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	127,687
5. Actuarial value of assets at December 31, 2013	134,165
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	6,478
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$12,230**

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	**($69,530)**
2. Expected increase	(5,387)
3. Liability (gain)/loss	(5,752)
4. Asset (gain)/loss	(6,478)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($87,147)**

[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	($87,147)	($69,530)
2. Next year's Tier 1/Tier 2 UAL payment	(6,308)	(5,033)
3. Combined valuation payroll	48,604	45,124
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(12.98%)	(11.15%)

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	14.24%	14.33%
b. Tier 1/Tier 2 UAL rate	(12.98%)	(11.15%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	1.41%	3.31%

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	5.82%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	5.82%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.16%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	285%
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.)*	11.82%
7. July 1, 2015 total pension rate, before adjustment	1.41%
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	(12.98%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(12.98%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	1.41%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	4.06%
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.)*	18.30%
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	18.30%	16.46%
b. Tier 1/Tier 2 UAL rate	(12.98%)	(11.15%)
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	0	0	0
Tier 1/Tier 2 valuation payroll	0	0	0
OPSRP valuation payroll	0	48,604	48,604
Combined valuation payroll	**$0**	**$48,604**	**$48,604**

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	1	0	N/A	1	1	0	N/A	1
Total	1	0	N/A	1	1	0	N/A	1
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	1	0	0	1
Police & Fire	4	0	0	4	4	0	0	4
Total	4	0	0	4	5	0	0	5
Grand Total Number of Members	**5**	**1**	**1**	**7**	**6**	**1**	**1**	**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

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										
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+	1	71
Total	1	71

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	3	54
65-69		
70-74	1	75
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	4	59

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

City of Prairie City/2218
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
City of Prairie City/2218

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

City of Prairie City -- #2218

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Prairie City 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 City of Prairie City.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Prairie City

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	10.29%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(2.17%)	(2.17%)	(2.17%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.73%**	**5.77%**	**9.88%**
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	**9.26%**	**6.22%**	**10.33%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 103%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	8.12%	8.12%
Minimum July 1, 2017 Rate	5.12%	2.12%
Maximum July 1, 2017 Rate	11.12%	14.12%

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	$1,244,294	$1,465,673	$221,379	85%	$136,832	162%
12/31/2009	1,431,201	1,545,579	114,378	93%	178,976	64%
12/31/2010	1,316,020	1,342,502	26,482	98%	186,224	14%
12/31/2011	1,335,696	1,442,081	106,385	93%	186,382	57%
12/31/2012	1,502,438	1,452,831	(49,607)	103%	169,129	(29%)
12/31/2013	1,646,646	1,601,587	(45,059)	103%	140,853	(32%)

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.

City of Prairie City

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($45,059)	($49,607)
Allocated pooled OPSRP UAL	9,959	11,921
Side account	0	0
Net unfunded pension actuarial accrued liability	(35,100)	(37,686)
Combined valuation payroll	140,853	169,129
Net pension UAL as a percentage of payroll	(25%)	(22%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,950	$3,548

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	$14,493	$19,025
Tier 1/Tier 2 valuation payroll	140,853	169,129
Tier 1/Tier 2 pension normal cost rate	10.29%	11.25%
Tier 1/ Tier 2 Actuarial accrued liability	$1,601,587	$1,452,831
Actuarial asset value	1,646,646	1,502,438
Tier 1/Tier 2 Unfunded actuarial accrued liability	(45,059)	(49,607)
Tier 1/ Tier 2 Funded status	103%	103%
Combined valuation payroll	$140,853	$169,129
Tier 1/Tier 2 UAL as a percentage of payroll	(32%)	(29%)
Tier 1/Tier 2 UAL rate	(2.17%)	(1.99%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	4	5
Tier 1/Tier 2 dormant members	2	1
Tier 1/Tier 2 retirees and beneficiaries	8	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	140,853	169,129
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]	$357,529	$384,593
2. Employer reserves	943,949	927,630
3. Benefits in force reserve	345,168	190,215
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,646,646**	**$1,502,438**

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	$1,502,438
2.	Regular employer contributions	16,180
3.	Benefit payments and expense	(53,433)
4.	Adjustments [2]	(41,734)
5.	Interest credited	223,195
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,646,646**

[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	3,896	9,963
Tier 2 Police & Fire	0	0
Tier 2 General Service	10,597	9,062
Total	**$14,493**	**$19,025**

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	$14,493	$14,493	$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	119,519	302,226
▪ Tier 2 Police & Fire	113,902	114,266
▪ Tier 2 General Service	159,808	121,472
▪ **Total Active Members**	**$393,229**	**$537,964**
Dormant Members	651,959	594,329
Retired Members and Beneficiaries	556,399	320,538
Total Actuarial Accrued Liability	**$1,601,587**	**$1,452,831**

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

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

	Before Changes	After Changes	Net Change
Actuarial Accrued Liability	$1,601,587	$1,601,587	$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	$1,601,587	$1,452,831
2. Actuarial value of assets	1,646,646	1,502,438
3. Unfunded accrued liability *(1. – 2.)*	(45,059)	(49,607)
4. Funded percentage *(2. ÷ 1.)*	103%	103%
5. Combined valuation payroll	$140,853	$169,129
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(32%)	(29%)

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	($45,059)	($3,261)
Total				**($45,059)**	**($3,261)**

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	$1,452,831
b. Normal cost at December 31, 2012	19,025
c. Benefit payments during 2013	(53,010)
d. Interest at 7.75% to December 31, 2013	112,015
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,530,861
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.)*	1,530,861
2. Actuarial accrued liability at December 31, 2013	1,601,587
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(70,726)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,502,438
b. Contributions for 2013[1]	16,180
c. Benefit payments and expenses during 2013	(53,433)
d. Interest at 7.75% to December 31, 2013	114,995
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,580,180
5. Actuarial value of assets at December 31, 2013	1,646,646
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	66,466
7. Total actuarial gain/(loss) ***(3. + 6.)***	**($4,260)**

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	**($49,607)**
2. Expected increase	288
3. Liability (gain)/loss	70,726
4. Asset (gain)/loss	(66,466)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($45,059)**

[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	3,896	28,893	13.48%	9,963	74,813	13.32%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	10,597	111,960	9.46%	9,062	94,316	9.61%
Total	**$14,493**	**$140,853**	**10.29%**	**$19,025**	**$169,129**	**11.25%**

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	($45,059)	($49,607)
2. Next year's Tier 1/Tier 2 UAL payment	(3,261)	(3,591)
3. Combined valuation payroll	140,853	169,129
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(2.32%)	(2.12%)

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	10.29%	11.25%
b. Tier 1/Tier 2 UAL rate	(2.32%)	(2.12%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	8.12%	9.26%

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	103%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	5.71%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.71%
7. July 1, 2015 total pension rate, before adjustment	8.12%
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	(2.32%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(2.32%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.12%
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	10.29%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	10.29%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	8.12%

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	10.29%	11.25%
b. Tier 1/Tier 2 UAL rate	(2.32%)	(2.12%)
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%)*	8.12%	9.26%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$28,893	$0	$28,893
Tier 2	111,960	0	111,960
Tier 1/Tier 2 valuation payroll	140,853	0	140,853
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$140,853**	**$0**	**$140,853**

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	3	0	4	2	3	0	5
Police & Fire	0	0	0	0	0	0	0	0
Total	1	3	0	4	2	3	0	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	1	N/A	1	0	1	N/A	1
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	1	0	1	0	0	0	0
Total	1	1	0	2	1	0	0	1
Retired Members and Beneficiaries								
General Service	4	0	0	4	3	0	0	3
Police & Fire	3	1	0	4	3	1	0	4
Total	7	1	0	8	6	1	0	7
Grand Total Number of Members	**9**	**6**	**0**	**15**	**9**	**5**	**0**	**14**

[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			1							**1**
45-49										
50-54										
55-59				1						**1**
60-64					1					**1**
65-69										
70-74										
75+										
Total	**0**	**1**	**1**	**1**	**1**	**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	111
55-59	1	4,380
60-64		
65-69		
70-74		
75+		
Total	2	2,246

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	3	637
65-69	2	487
70-74	1	276
75-79	1	249
80-84		
85-89		
90-94	1	446
95-99		
100+		
Total	8	482

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

City of Prineville/2146
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
City of Prineville/2146

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

City of Prineville -- #2146

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Prineville 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 City of Prineville.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Prineville

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.46%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(1.03%)	(1.03%)	(1.03%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**14.04%**	**6.91%**	**11.02%**
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	**14.57%**	**7.36%**	**11.47%**

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	13.43%	13.43%
Minimum July 1, 2017 Rate	10.43%	7.43%
Maximum July 1, 2017 Rate	16.43%	19.43%

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	$11,841,127	$14,892,263	$3,051,136	80%	$3,483,751	88%
12/31/2009	13,028,663	15,500,618	2,471,955	84%	3,287,676	75%
12/31/2010	14,080,970	16,407,260	2,326,290	86%	3,605,853	65%
12/31/2011	13,842,964	17,171,719	3,328,755	81%	3,614,154	92%
12/31/2012	15,017,643	17,271,790	2,254,147	87%	3,682,268	61%
12/31/2013	16,602,350	18,041,760	1,439,410	92%	3,875,956	37%

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.

City of Prineville

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$1,439,410	$2,254,147
Allocated pooled OPSRP UAL	274,054	259,536
Side account	0	0
Net unfunded pension actuarial accrued liability	1,713,464	2,513,683
Combined valuation payroll	3,875,956	3,682,268
Net pension UAL as a percentage of payroll	44%	68%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$53,647	$77,256

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	$263,328	$259,614
Tier 1/Tier 2 valuation payroll	1,820,844	1,812,084
Tier 1/Tier 2 pension normal cost rate	14.46%	14.33%
Tier 1/ Tier 2 Actuarial accrued liability	$18,041,760	$17,271,790
Actuarial asset value	16,602,350	15,017,643
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,439,410	2,254,147
Tier 1/ Tier 2 Funded status	92%	87%
Combined valuation payroll	$3,875,956	$3,682,268
Tier 1/Tier 2 UAL as a percentage of payroll	37%	61%
Tier 1/Tier 2 UAL rate	(1.03%)	(0.90%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	27	29
Tier 1/Tier 2 dormant members	21	23
Tier 1/Tier 2 retirees and beneficiaries	55	53

[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	3,875,956	3,682,268
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]	$3,015,873	$2,857,871
2. Employer reserves	8,403,187	7,189,704
3. Benefits in force reserve	5,183,290	4,970,068
4. Total market value of assets ***(1. + 2. + 3.)***	**$16,602,350**	**$15,017,643**

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	$15,017,643
2. Regular employer contributions	180,024
3. Benefit payments and expense	(802,395)
4. Adjustments [2]	115,038
5. Interest credited	2,092,040
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$16,602,350**

[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	$61,936	$58,957
Tier 1 General Service	93,979	89,983
Tier 2 Police & Fire	47,214	43,833
Tier 2 General Service	60,199	66,841
Total	**$263,328**	**$259,614**

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	$263,328	$263,328	$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	$3,616,131	$3,322,050
▪ Tier 1 General Service	3,010,646	2,709,465
▪ Tier 2 Police & Fire	1,323,185	1,190,934
▪ Tier 2 General Service	1,143,813	1,071,974
▪ **Total Active Members**	**$9,093,775**	**$8,294,423**
Dormant Members	592,703	602,116
Retired Members and Beneficiaries	8,355,282	8,375,251
Total Actuarial Accrued Liability	**$18,041,760**	**$17,271,790**

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	$18,041,760	$18,041,760	$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	$18,041,760	$17,271,790
2. Actuarial value of assets	16,602,350	15,017,643
3. Unfunded accrued liability *(1. – 2.)*	1,439,410	2,254,147
4. Funded percentage *(2. ÷ 1.)*	92%	87%
5. Combined valuation payroll	$3,875,956	$3,682,268
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	37%	61%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$1,439,410	$104,184
Total				**$1,439,410**	**$104,184**

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	$17,271,790
b. Normal cost at December 31, 2012	259,614
c. Benefit payments during 2013	(796,031)
d. Interest at 7.75% to December 31, 2013	1,327,838
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	18,063,211
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.)*	18,063,211
2. Actuarial accrued liability at December 31, 2013	18,041,760
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	21,451
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	15,017,643
b. Contributions for 2013[1]	180,024
c. Benefit payments and expenses during 2013	(802,395)
d. Interest at 7.75% to December 31, 2013	1,139,750
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	15,535,023
5. Actuarial value of assets at December 31, 2013	16,602,350
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	1,067,328
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$1,088,779**

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	**$2,254,147**
2. Expected increase	274,042
3. Liability (gain)/loss	(21,451)
4. Asset (gain)/loss	(1,067,328)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$1,439,410**

[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	$61,936	$333,993	18.54%	$58,957	$318,340	18.52%
Tier 1 General Service	93,979	629,520	14.93%	89,983	577,641	15.58%
Tier 2 Police & Fire	47,214	266,405	17.72%	43,833	246,199	17.80%
Tier 2 General Service	60,199	590,926	10.19%	66,841	669,904	9.98%
Total	**$263,328**	**$1,820,844**	**14.46%**	**$259,614**	**$1,812,084**	**14.33%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$1,439,410	$2,254,147
2. Next year's Tier 1/Tier 2 UAL payment	104,184	163,155
3. Combined valuation payroll	3,875,956	3,682,268
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	2.69%	4.43%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.46%	14.33%
b. Tier 1/Tier 2 UAL rate	2.69%	4.43%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	17.30%	18.89%

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	10.43%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	10.43%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.09%
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%)*	7.43%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	13.43%
7. July 1, 2015 total pension rate, before adjustment	17.30%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(3.87%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	2.69%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(1.18%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	13.43%
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	14.46%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.46%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	13.43%

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	14.46%	14.33%
b. Tier 1/Tier 2 UAL rate	(1.18%)	(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%)*	13.43%	13.43%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$629,520	$333,993	$963,513
Tier 2	590,926	266,405	857,331
Tier 1/Tier 2 valuation payroll	1,220,446	600,398	1,820,844
OPSRP valuation payroll	1,357,846	697,266	2,055,112
Combined valuation payroll	**$2,578,292**	**$1,297,664**	**$3,875,956**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	10	10	29	49	10	12	29	51
Police & Fire	4	3	11	18	4	3	9	16
Total	14	13	40	67	14	15	38	67
Active Members with previous service segments with the employer								
General Service	6	7	N/A	13	4	3	N/A	7
Police & Fire	10	10	N/A	20	3	6	N/A	9
Total	16	17	N/A	33	7	9	N/A	16
Dormant Members								
General Service	1	14	8	23	2	15	6	23
Police & Fire	0	6	0	6	0	6	0	6
Total	1	20	8	29	2	21	6	29
Retired Members and Beneficiaries								
General Service	31	1	0	32	30	1	0	31
Police & Fire	22	1	0	23	21	1	0	22
Total	53	2	0	55	51	2	0	53
Grand Total Number of Members	**84**	**52**	**48**	**184**	**74**	**47**	**44**	**165**

[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**
30-34										
35-39			1	1						**2**
40-44				1						**1**
45-49			1		1	3				**5**
50-54			4	1	3					**8**
55-59			2	1	2					**5**
60-64			2			1	1			**4**
65-69						1				**1**
70-74										
75+										
Total	**0**	**0**	**11**	**4**	**6**	**5**	**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	1	661
35-39	6	299
40-44	1	12
45-49	4	679
50-54	1	394
55-59	4	413
60-64	2	204
65-69	2	68
70-74		
75+		
Total	21	370

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	753
55-59	9	1,058
60-64	13	1,171
65-69	14	1,197
70-74	8	1,376
75-79	4	246
80-84	3	1,049
85-89	2	1,667
90-94	1	554
95-99		
100+		
Total	55	1,114

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

City of Rainier/2297
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
City of Rainier/2297

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

City of Rainier -- #2297

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Rainier 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 City of Rainier.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Rainier

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.83%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(4.12%)	(4.12%)	(4.12%)
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%**	**3.82%**	**7.93%**
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%**	**4.27%**	**8.38%**

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

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

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	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	$3,730,296	$3,999,452	$269,156	93%	$876,422	31%
12/31/2009	3,420,137	3,646,822	226,685	94%	1,021,880	22%
12/31/2010	3,747,957	4,261,276	513,319	88%	1,009,433	51%
12/31/2011	3,641,708	4,207,024	565,316	87%	1,076,703	53%
12/31/2012	3,755,949	3,944,269	188,320	95%	950,115	20%
12/31/2013	4,623,898	4,379,839	(244,059)	106%	792,879	(31%)

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.

City of Rainier

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($244,059)	$188,320
Allocated pooled OPSRP UAL	56,061	66,967
Side account	0	0
Net unfunded pension actuarial accrued liability	(187,998)	255,287
Combined valuation payroll	792,879	950,115
Net pension UAL as a percentage of payroll	(24%)	27%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,974	$19,934

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	$76,488	$78,241
Tier 1/Tier 2 valuation payroll	483,096	519,230
Tier 1/Tier 2 pension normal cost rate	15.83%	15.07%
Tier 1/ Tier 2 Actuarial accrued liability	$4,379,839	$3,944,269
Actuarial asset value	4,623,898	3,755,949
Tier 1/Tier 2 Unfunded actuarial accrued liability	(244,059)	188,320
Tier 1/ Tier 2 Funded status	106%	95%
Combined valuation payroll	$792,879	$950,115
Tier 1/Tier 2 UAL as a percentage of payroll	(31%)	20%
Tier 1/Tier 2 UAL rate	(4.12%)	(3.36%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	8	9
Tier 1/Tier 2 dormant members	3	5
Tier 1/Tier 2 retirees and beneficiaries	13	12

[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	792,879	950,115
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]	$573,603	$503,225
2. Employer reserves	2,513,764	1,934,646
3. Benefits in force reserve	1,536,531	1,318,078
4. Total market value of assets *(1. + 2. + 3.)*	**$4,623,898**	**$3,755,949**

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	$3,755,949
2.	Regular employer contributions	29,973
3.	Benefit payments and expense	(237,861)
4.	Adjustments[2]	475,850
5.	Interest credited	599,987
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$4,623,898**

[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	$20,014	$8,735
Tier 1 General Service	6,451	21,938
Tier 2 Police & Fire	36,442	35,010
Tier 2 General Service	13,581	12,558
Total	**$76,488**	**$78,241**

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	$76,488	$76,488	$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	$472,300	$351,748
▪ Tier 1 General Service	470,077	425,773
▪ Tier 2 Police & Fire	615,998	544,122
▪ Tier 2 General Service	234,412	206,099
▪ **Total Active Members**	**$1,792,787**	**$1,527,742**
Dormant Members	110,219	195,383
Retired Members and Beneficiaries	2,476,833	2,221,144
Total Actuarial Accrued Liability	**$4,379,839**	**$3,944,269**

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	$4,379,839	$4,379,839	$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	$4,379,839	$3,944,269
2. Actuarial value of assets	4,623,898	3,755,949
3. Unfunded accrued liability *(1. – 2.)*	(244,059)	188,320
4. Funded percentage *(2. ÷ 1.)*	106%	95%
5. Combined valuation payroll	$792,879	$950,115
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(31%)	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	($244,059)	($17,665)
Total				**($244,059)**	**($17,665)**

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	$3,944,269
b. Normal cost at December 31, 2012	78,241
c. Benefit payments during 2013	(235,975)
d. Interest at 7.75% to December 31, 2013	302,600
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	4,089,135
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 *(e. + f.)*	4,089,135
2. Actuarial accrued liability at December 31, 2013	4,379,839
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(290,704)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	3,755,949
b. Contributions for 2013[1]	29,973
c. Benefit payments and expenses during 2013	(237,861)
d. Interest at 7.75% to December 31, 2013	283,030
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	3,831,092
5. Actuarial value of assets at December 31, 2013	4,623,898
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	792,806
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$502,102**

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	**$188,320**
2. Expected increase	69,723
3. Liability (gain)/loss	290,704
4. Asset (gain)/loss	(792,806)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($244,059)**

[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	$20,014	$105,537	18.96%	$8,735	$47,427	18.42%
Tier 1 General Service	6,451	21,801	29.59%	21,938	134,009	16.37%
Tier 2 Police & Fire	36,442	237,027	15.37%	35,010	229,120	15.28%
Tier 2 General Service	13,581	118,731	11.44%	12,558	108,674	11.56%
Total	**$76,488**	**$483,096**	**15.83%**	**$78,241**	**$519,230**	**15.07%**

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	($244,059)	$188,320
2. Next year's Tier 1/Tier 2 UAL payment	(17,665)	13,631
3. Combined valuation payroll	792,879	950,115
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(2.23%)	1.43%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	15.83%	15.07%
b. Tier 1/Tier 2 UAL rate	(2.23%)	1.43%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.75%	16.63%

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	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.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	5.71%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.71%
7. July 1, 2015 total pension rate, before adjustment	13.75%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.04%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(2.23%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(4.27%)
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	15.83%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.83%
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	15.83%	15.07%
b. Tier 1/Tier 2 UAL rate	(4.27%)	(3.49%)
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	$21,801	$105,537	$127,338
Tier 2	118,731	237,027	355,758
Tier 1/Tier 2 valuation payroll	140,532	342,564	483,096
OPSRP valuation payroll	235,536	74,247	309,783
Combined valuation payroll	**$376,068**	**$416,811**	**$792,879**

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	2	5	8	3	2	6	11
Police & Fire	2	3	1	6	1	3	2	6
Total	3	5	6	14	4	5	8	17
Active Members with previous service segments with the employer								
General Service	3	1	N/A	4	1	0	N/A	1
Police & Fire	2	1	N/A	3	1	1	N/A	2
Total	5	2	N/A	7	2	1	N/A	3
Dormant Members								
General Service	1	1	0	2	1	1	0	2
Police & Fire	0	1	0	1	1	2	0	3
Total	1	2	0	3	2	3	0	5
Retired Members and Beneficiaries								
General Service	7	0	0	7	7	0	0	7
Police & Fire	6	0	0	6	5	0	0	5
Total	13	0	0	13	12	0	0	12
Grand Total Number of Members	**22**	**9**	**6**	**37**	**20**	**9**	**8**	**37**

[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	2						3
45-49			1	1						2
50-54										
55-59				1						1
60-64					2					2
65-69										
70-74										
75+										
Total	0	0	2	4	2	0	0	0	0	8

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	551
50-54		
55-59	1	3,271
60-64		
65-69		
70-74		
75+		
Total	3	1,458

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	2	1,936
60-64		
65-69	6	1,689
70-74	2	997
75-79	1	124
80-84	2	930
85-89		
90-94		
95-99		
100+		
Total	13	1,383

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

City of Salem/2101
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
City of Salem/2101

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

City of Salem -- #2101

September 2014

Secondary Employers

2136	Salem Department Of Utilities
2661	Lincoln County 911
2748	Salem Area Mass Transit Authority

CONTENTS

Executive Summary

Milliman has prepared this report for City of Salem 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 City of Salem.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Salem

	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]	7.31%	7.31%	7.31%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	(7.08%)	(7.08%)	(7.08%)
Net pension contribution rate	**15.29%**	**8.17%**	**12.28%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**15.82%**	**8.62%**	**12.73%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 85%.

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	21.76%	21.76%
Minimum July 1, 2017 Rate	17.41%	13.06%
Maximum July 1, 2017 Rate	26.11%	30.46%

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	$332,415,600	$404,323,293	$71,907,693	82%	$74,259,963	97%
12/31/2009	374,130,052	429,509,843	55,379,791	87%	74,520,439	74%
12/31/2010	395,595,667	449,744,424	54,148,757	88%	76,156,229	71%
12/31/2011	385,499,542	465,044,196	79,544,654	83%	77,274,971	103%
12/31/2012	426,847,155	469,350,980	42,503,825	91%	77,123,538	55%
12/31/2013	468,955,181	486,497,219	17,542,038	96%	76,037,921	23%

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.

City of Salem

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$75,209,231	$96,204,271
Allocated pooled OPSRP UAL	5,376,344	5,435,879
Side account	57,667,193	53,700,446
Net unfunded pension actuarial accrued liability	22,918,382	47,939,704
Combined valuation payroll	76,037,921	77,123,538
Net pension UAL as a percentage of payroll	30%	62%
Calculated side account rate relief	(7.08%)	(6.18%)
Allocated pooled RHIA UAL	$1,052,446	$1,618,085

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	$7,211,682	$7,562,929
Tier 1/Tier 2 valuation payroll	49,925,023	52,680,079
Tier 1/Tier 2 pension normal cost rate	14.45%	14.36%
Tier 1/ Tier 2 Actuarial accrued liability	$486,497,219	$469,350,980
Actuarial asset value	411,287,988	373,146,709
Tier 1/Tier 2 Unfunded actuarial accrued liability	75,209,231	96,204,271
Tier 1/ Tier 2 Funded status	85%	80%
Combined valuation payroll	$76,037,921	$77,123,538
Tier 1/Tier 2 UAL as a percentage of payroll	99%	125%
Tier 1/Tier 2 UAL rate	7.31%	9.14%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	667	724
Tier 1/Tier 2 dormant members	255	280
Tier 1/Tier 2 retirees and beneficiaries	1,037	978

[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**	**$53,700,446**	**$53,700,446**
2. Deposits made during 2013		N/A	
3. Administrative expenses		(2,000)	(2,000)
4. Amount transferred to employer reserves during 2013		(4,274,118)	(4,274,118)
5. Side account earnings during 2013		8,242,864	8,242,864
6. Side account as of December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***		**$57,667,193**	**$57,667,193**

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side account 1	$53,973,059	$50,261,544
Side account 2	3,694,134	3,438,902
Side account 3	0	0
Total	**$57,667,193**	**$53,700,446**

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	$57,667,193	$53,700,446
2. Combined valuation payroll	76,037,921	77,123,538
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	(7.08%)	(6.18%)

[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]	$56,411,782	$60,029,750
2. Employer reserves	172,807,260	151,804,319
3. Benefits in force reserve	182,068,946	161,312,641
4. Total market value of assets ***(1. + 2. + 3.)***	**$411,287,988**	**$373,146,709**

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	$373,146,709
2. Regular employer contributions	7,244,080
3. Benefit payments and expense	(28,185,036)
4. Adjustments [2]	587,426
5. Interest credited	54,220,691
6. Total transferred from side accounts	4,274,118
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$411,287,988**

[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	$1,943,105	$1,990,100
Tier 1 General Service	1,946,100	2,189,794
Tier 2 Police & Fire	1,618,144	1,603,510
Tier 2 General Service	1,704,333	1,779,525
Total	**$7,211,682**	**$7,562,929**

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	$7,211,682	$7,211,682	$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	$56,233,696	$55,289,183
▪ Tier 1 General Service	58,640,023	63,141,402
▪ Tier 2 Police & Fire	24,794,649	22,043,455
▪ Tier 2 General Service	32,311,720	30,696,339
▪ **Total Active Members**	**$171,980,088**	**$171,170,379**
Dormant Members	21,028,389	26,346,526
Retired Members and Beneficiaries	293,488,742	271,834,075
Total Actuarial Accrued Liability	**$486,497,219**	**$469,350,980**

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	$486,497,219	$486,497,219	$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	$486,497,219	$469,350,980
2. Actuarial value of assets	411,287,988	373,146,709
3. Unfunded accrued liability *(1. – 2.)*	75,209,231	96,204,271
4. Funded percentage *(2. ÷ 1.)*	85%	80%
5. Combined valuation payroll	$76,037,921	$77,123,538
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	99%	125%

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	$75,209,231	$5,443,633
Total				**$75,209,231**	**$5,443,633**

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	$469,350,980
b. Normal cost at December 31, 2012	7,562,929
c. Benefit payments during 2013	(27,961,482)
d. Interest at 7.75% to December 31, 2013	35,877,321
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	484,829,748
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.)*	484,829,748
2. Actuarial accrued liability at December 31, 2013	486,497,219
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(1,667,471)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	373,146,709
b. Contributions for 2013[1]	11,518,198
c. Benefit payments and expenses during 2013	(28,185,036)
d. Interest at 7.75% to December 31, 2013	28,273,030
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	384,752,901
5. Actuarial value of assets at December 31, 2013	411,287,988
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	26,535,087
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$24,867,616**

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	**$96,204,271**
2. Expected increase	3,872,576
3. Liability (gain)/loss	1,667,471
4. Asset (gain)/loss	(26,535,087)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$75,209,231**

[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	$1,943,105	$10,444,283	18.60%	$1,990,100	$10,761,610	18.49%
Tier 1 General Service	1,946,100	13,003,401	14.97%	2,189,794	14,770,924	14.83%
Tier 2 Police & Fire	1,618,144	10,718,021	15.10%	1,603,510	10,677,766	15.02%
Tier 2 General Service	1,704,333	15,759,318	10.81%	1,779,525	16,469,779	10.80%
Total	**$7,211,682**	**$49,925,023**	**14.45%**	**$7,562,929**	**$52,680,079**	**14.36%**

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	$75,209,231	$96,204,271
2. Next year's Tier 1/Tier 2 UAL payment	5,443,633	6,963,251
3. Combined valuation payroll	76,037,921	77,123,538
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	7.16%	9.03%

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%	14.36%
b. Tier 1/Tier 2 UAL rate	7.16%	9.03%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	21.76%	23.52%

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	13.92%
2. Employer contribution rate attributable to side accounts	(5.66%)
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	19.58%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.92%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.92%
c. Funded percentage	85%
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.)*	3.92%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	15.66%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	23.50%
7. July 1, 2015 total pension rate, before adjustment	21.76%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	7.16%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	7.16%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	21.76%
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	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.)*	21.76%

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	14.45%	14.36%
b. Tier 1/Tier 2 UAL rate	7.16%	9.01%
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%)*	21.76%	23.50%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$13,003,401	$10,444,283	$23,447,684
Tier 2	15,759,318	10,718,021	26,477,339
Tier 1/Tier 2 valuation payroll	28,762,719	21,162,304	49,925,023
OPSRP valuation payroll	18,392,104	7,720,794	26,112,898
Combined valuation payroll	**$47,154,823**	**$28,883,098**	**$76,037,921**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	195	247	348	790	222	268	336	826
Police & Fire	109	116	94	319	115	119	91	325
Total	304	363	442	1,109	337	387	427	1,151
Active Members with previous service segments with the employer								
General Service	149	159	N/A	308	121	118	N/A	239
Police & Fire	40	19	N/A	59	39	15	N/A	54
Total	189	178	N/A	367	160	133	N/A	293
Dormant Members								
General Service	115	114	35	264	137	113	28	278
Police & Fire	18	8	2	28	23	7	1	31
Total	133	122	37	292	160	120	29	309
Retired Members and Beneficiaries								
General Service	638	84	2	724	582	92	2	676
Police & Fire	310	5	0	315	284	20	0	304
Total	948	89	2	1,039	866	112	2	980
Grand Total Number of Members	**1,574**	**752**	**481**	**2,807**	**1,523**	**752**	**458**	**2,733**

[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	7	1						**9**
35-39		8	54	8						**70**
40-44		4	55	56	5					**120**
45-49		2	49	50	23	5				**129**
50-54		2	43	26	20	21	4			**116**
55-59		3	32	18	26	33	8			**120**
60-64			18	23	14	17	4	2		**78**
65-69		3	4	6	3	6	1		1	**24**
70-74					1					**1**
75+										
Total	**0**	**23**	**262**	**188**	**92**	**82**	**17**	**2**	**1**	**667**

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	5	529
35-39	25	568
40-44	41	800
45-49	37	1,319
50-54	47	1,163
55-59	53	1,061
60-64	27	510
65-69	11	492
70-74	6	288
75+	3	2,983
Total	255	938

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	7	1,529
45-49	4	3,092
50-54	15	2,417
55-59	103	2,507
60-64	228	2,496
65-69	268	2,079
70-74	202	2,013
75-79	94	1,673
80-84	60	1,309
85-89	41	1,073
90-94	12	573
95-99	3	120
100+		
Total	1,037	2,061

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

City of Sheridan/2219
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
City of Sheridan/2219

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

City of Sheridan -- #2219

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Sheridan 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 City of Sheridan.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Sheridan

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.39%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(3.00%)	(3.00%)	(3.00%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**11.00%**	**4.94%**	**9.05%**
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	**11.53%**	**5.39%**	**9.50%**

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 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	10.39%	10.39%
Minimum July 1, 2017 Rate	7.39%	4.39%
Maximum July 1, 2017 Rate	13.39%	16.39%

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	$3,227,801	$3,325,532	$97,731	97%	$841,486	12%
12/31/2009	3,658,243	3,597,257	(60,986)	102%	872,695	(7%)
12/31/2010	3,537,952	3,788,496	250,544	93%	695,529	36%
12/31/2011	3,351,410	3,904,549	553,139	86%	843,575	66%
12/31/2012	3,729,854	3,992,295	262,441	93%	923,697	28%
12/31/2013	4,145,881	4,051,158	(94,723)	102%	926,539	(10%)

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.

City of Sheridan

	Actuarial Valuation as of	
	December 31, 2013	December 31, 2012
T1/T2 UAL	($94,723)	$262,441
Allocated pooled OPSRP UAL	65,512	65,105
Side account	0	0
Net unfunded pension actuarial accrued liability	(29,211)	327,546
Combined valuation payroll	926,539	923,697
Net pension UAL as a percentage of payroll	(3%)	35%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$12,824	$19,380

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	$71,037	$71,254
Tier 1/Tier 2 valuation payroll	530,578	552,131
Tier 1/Tier 2 pension normal cost rate	13.39%	12.91%
Tier 1/ Tier 2 Actuarial accrued liability	$4,051,158	$3,992,295
Actuarial asset value	4,145,881	3,729,854
Tier 1/Tier 2 Unfunded actuarial accrued liability	(94,723)	262,441
Tier 1/ Tier 2 Funded status	102%	93%
Combined valuation payroll	$926,539	$923,697
Tier 1/Tier 2 UAL as a percentage of payroll	(10%)	28%
Tier 1/Tier 2 UAL rate	(3.00%)	(2.52%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	8	9
Tier 1/Tier 2 dormant members	3	2
Tier 1/Tier 2 retirees and beneficiaries	27	26

[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	926,539	923,697
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]	$517,550	$469,503
2. Employer reserves	2,156,003	1,833,173
3. Benefits in force reserve	1,472,328	1,427,178
4. Total market value of assets *(1. + 2. + 3.)*	**$4,145,881**	**$3,729,854**

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	$3,729,854
2.	Regular employer contributions	34,055
3.	Benefit payments and expense	(227,922)
4.	Adjustments [2]	74,522
5.	Interest credited	535,373
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$4,145,881**

[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	34,866	33,836
Tier 2 Police & Fire	0	0
Tier 2 General Service	36,171	37,418
Total	**$71,037**	**$71,254**

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	$71,037	$71,037	$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	1,031,476	980,890
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	609,598	582,658
▪ **Total Active Members**	**$1,641,074**	**$1,563,548**
Dormant Members	36,744	23,756
Retired Members and Beneficiaries	2,373,340	2,404,991
Total Actuarial Accrued Liability	**$4,051,158**	**$3,992,295**

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	$4,051,158	$4,051,158	$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	$4,051,158	$3,992,295
2. Actuarial value of assets	4,145,881	3,729,854
3. Unfunded accrued liability *(1. – 2.)*	(94,723)	262,441
4. Funded percentage *(2. ÷ 1.)*	102%	93%
5. Combined valuation payroll	$926,539	$923,697
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(10%)	28%

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	($94,723)	($6,856)
Total				**($94,723)**	**($6,856)**

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	$3,992,295
b. Normal cost at December 31, 2012	71,254
c. Benefit payments during 2013	(226,115)
d. Interest at 7.75% to December 31, 2013	306,163
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	4,143,597
f. Change in actuarial accrued liability due to assumption, method, and plan changes	0
g. Expected actuarial accrued liability at December 31, 2013 *(e. + f.)*	4,143,597
2. Actuarial accrued liability at December 31, 2013	4,051,158
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	92,439
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	3,729,854
b. Contributions for 2013[1]	34,055
c. Benefit payments and expenses during 2013	(227,922)
d. Interest at 7.75% to December 31, 2013	281,551
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	3,817,538
5. Actuarial value of assets at December 31, 2013	4,145,881
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	328,343
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$420,782**

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	**$262,441**
2. Expected increase	63,618
3. Liability (gain)/loss	(92,439)
4. Asset (gain)/loss	(328,343)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($94,723)**

[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	34,866	195,526	17.83%	33,836	195,308	17.32%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	36,171	335,052	10.80%	37,418	356,823	10.49%
Total	**$71,037**	**$530,578**	**13.39%**	**$71,254**	**$552,131**	**12.91%**

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	($94,723)	$262,441
2. Next year's Tier 1/Tier 2 UAL payment	(6,856)	18,995
3. Combined valuation payroll	926,539	923,697
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(0.74%)	2.06%

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	13.39%	12.91%
b. Tier 1/Tier 2 UAL rate	(0.74%)	2.06%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	12.80%	15.10%

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	7.39%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	7.39%
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	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%)*	4.39%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	10.39%
7. July 1, 2015 total pension rate, before adjustment	12.80%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(2.41%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(0.74%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.15%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	10.39%
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	13.39%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.39%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	10.39%

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	13.39%	12.91%
b. Tier 1/Tier 2 UAL rate	(3.15%)	(2.65%)
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%)*	10.39%	10.39%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$195,526	$0	$195,526
Tier 2	335,052	0	335,052
Tier 1/Tier 2 valuation payroll	530,578	0	530,578
OPSRP valuation payroll	395,961	0	395,961
Combined valuation payroll	**$926,539**	**$0**	**$926,539**

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	5	9	17	3	6	9	18
Police & Fire	0	0	0	0	0	0	0	0
Total	3	5	9	17	3	6	9	18
Active Members with previous service segments with the employer								
General Service	1	0	N/A	1	2	0	N/A	2
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	1	0	N/A	1	2	0	N/A	2
Dormant Members								
General Service	1	2	0	3	1	1	0	2
Police & Fire	0	0	0	0	0	0	0	0
Total	1	2	0	3	1	1	0	2
Retired Members and Beneficiaries								
General Service	16	2	0	18	15	2	0	17
Police & Fire	9	0	0	9	9	0	0	9
Total	25	2	0	27	24	2	0	26
Grand Total Number of Members	**30**	**9**	**9**	**48**	**30**	**9**	**9**	**48**

[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						**2**
55-59				1			1			**2**
60-64				1	1					**2**
65-69										
70-74										
75+										
Total	**0**	**0**	**3**	**3**	**1**	**0**	**1**	**0**	**0**	**8**

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	489
40-44		
45-49		
50-54		
55-59		
60-64		
65-69	1	192
70-74		
75+	1	26
Total	3	236

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	623
45-49		
50-54		
55-59	2	52
60-64	4	1,230
65-69	6	846
70-74	6	729
75-79		
80-84	3	357
85-89	3	971
90-94	2	166
95-99		
100+		
Total	27	719

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

City of Stanfield/2213
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
City of Stanfield/2213

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

City of Stanfield -- #2213

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Stanfield 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 City of Stanfield.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Stanfield

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	19.79%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(14.32%)	(14.32%)	(14.32%)
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 150%.

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	$1,669,932	$1,432,526	($237,406)	117%	$343,370	(69%)
12/31/2009	1,933,173	1,510,326	(422,847)	128%	324,357	(130%)
12/31/2010	2,098,371	1,564,203	(534,168)	134%	416,738	(128%)
12/31/2011	2,037,197	1,602,362	(434,835)	127%	379,898	(114%)
12/31/2012	2,276,037	1,638,465	(637,572)	139%	398,287	(160%)
12/31/2013	2,563,919	1,711,052	(852,867)	150%	390,228	(219%)

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.

City of Stanfield

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($852,867)	($637,572)
Allocated pooled OPSRP UAL	27,591	28,072
Side account	0	0
Net unfunded pension actuarial accrued liability	(825,276)	(609,500)
Combined valuation payroll	390,228	398,287
Net pension UAL as a percentage of payroll	(211%)	(153%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$5,401	$8,356

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	$26,718	$33,516
Tier 1/Tier 2 valuation payroll	186,539	208,845
Tier 1/Tier 2 pension normal cost rate	19.79%	16.90%
Tier 1/ Tier 2 Actuarial accrued liability	$1,711,052	$1,638,465
Actuarial asset value	2,563,919	2,276,037
Tier 1/Tier 2 Unfunded actuarial accrued liability	(852,867)	(637,572)
Tier 1/ Tier 2 Funded status	150%	139%
Combined valuation payroll	$390,228	$398,287
Tier 1/Tier 2 UAL as a percentage of payroll	(219%)	(160%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(14.32%)	(11.46%)
Tier 1/Tier 2 active members [1]	5	7
Tier 1/Tier 2 dormant members	7	7
Tier 1/Tier 2 retirees and beneficiaries	14	13

[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	390,228	398,287
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]	$294,185	$267,152
2. Employer reserves	1,816,595	1,577,597
3. Benefits in force reserve	453,139	431,288
4. Total market value of assets ***(1. + 2. + 3.)***	**$2,563,919**	**$2,276,037**

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	$2,276,037
2.	Regular employer contributions	(681)
3.	Benefit payments and expense	(70,148)
4.	Adjustments [2]	24,785
5.	Interest credited	333,926
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$2,563,919**

[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	12,540	12,229
Tier 2 Police & Fire	12,429	17,789
Tier 2 General Service	1,749	3,498
Total	**$26,718**	**$33,516**

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	$26,718	$26,718	$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	$50,307	$46,181
▪ Tier 1 General Service	255,377	231,625
▪ Tier 2 Police & Fire	212,684	222,849
▪ Tier 2 General Service	97,226	82,827
▪ **Total Active Members**	**$615,594**	**$583,482**
Dormant Members	365,013	328,203
Retired Members and Beneficiaries	730,445	726,780
Total Actuarial Accrued Liability	**$1,711,052**	**$1,638,465**

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	$1,711,052	$1,711,052	$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	$1,711,052	$1,638,465
2. Actuarial value of assets	2,563,919	2,276,037
3. Unfunded accrued liability *(1. – 2.)*	(852,867)	(637,572)
4. Funded percentage *(2. ÷ 1.)*	150%	139%
5. Combined valuation payroll	$390,228	$398,287
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(219%)	(160%)

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	($852,867)	($61,730)
Total				**($852,867)**	**($61,730)**

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	$1,638,465
b. Normal cost at December 31, 2012	33,516
c. Benefit payments during 2013	(69,592)
d. Interest at 7.75% to December 31, 2013	126,882
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,729,271
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.)*	1,729,271
2. Actuarial accrued liability at December 31, 2013	1,711,052
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	18,219
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,276,037
b. Contributions for 2013[1]	(681)
c. Benefit payments and expenses during 2013	(70,148)
d. Interest at 7.75% to December 31, 2013	173,648
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	2,378,856
5. Actuarial value of assets at December 31, 2013	2,563,919
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	185,063
7. Total actuarial gain/(loss) *(3. + 6.)*	**$203,282**

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	**($637,572)**
2. Expected increase	(12,013)
3. Liability (gain)/loss	(18,219)
4. Asset (gain)/loss	(185,063)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($852,867)**

[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	12,540	72,369	17.33%	12,229	77,601	15.76%
Tier 2 Police & Fire	12,429	94,199	13.19%	17,789	93,534	19.02%
Tier 2 General Service	1,749	19,971	8.76%	3,498	37,710	9.28%
Total	**$26,718**	**$186,539**	**14.32%**	**$33,516**	**$208,845**	**16.05%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	($852,867)	($637,572)
2. Next year's Tier 1/Tier 2 UAL payment	(61,730)	(46,147)
3. Combined valuation payroll	390,228	398,287
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(15.82%)	(11.59%)

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	14.32%	16.05%
b. Tier 1/Tier 2 UAL rate	(15.82%)	(11.59%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	(1.35%)	4.59%

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	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	150%
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	(1.35%)
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	1.35%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(15.82%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(14.47%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	0.00%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	5.47%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	14.32%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	19.79%
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	19.79%	16.90%
b. Tier 1/Tier 2 UAL rate	(14.47%)	(11.59%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	5.47%	5.44%
(a. + b. + c., minimum of 5.47%)		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$72,369	$0	$72,369
Tier 2	19,971	94,199	114,170
Tier 1/Tier 2 valuation payroll	92,340	94,199	186,539
OPSRP valuation payroll	119,776	83,913	203,689
Combined valuation payroll	**$212,116**	**$178,112**	**$390,228**

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	5	8	2	2	5	9
Police & Fire	0	2	3	5	0	3	2	5
Total	2	3	8	13	2	5	7	14
Active Members with previous service segments with the employer								
General Service	1	1	N/A	2	0	0	N/A	0
Police & Fire	2	1	N/A	3	0	1	N/A	1
Total	3	2	N/A	5	0	1	N/A	1
Dormant Members								
General Service	2	2	0	4	2	2	1	5
Police & Fire	1	2	0	3	1	2	0	3
Total	3	4	0	7	3	4	1	8
Retired Members and Beneficiaries								
General Service	6	1	0	7	6	1	0	7
Police & Fire	6	1	0	7	6	0	0	6
Total	12	2	0	14	12	1	0	13
Grand Total Number of Members	**20**	**11**	**8**	**39**	**17**	**11**	**8**	**36**

[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			1							1
40-44										
45-49					1					1
50-54										
55-59				1						1
60-64										
65-69										
70-74										
75+			1							1
Total	0	0	3	1	1	0	0	0	0	5

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	324
40-44	1	295
45-49	2	1,264
50-54		
55-59	1	43
60-64	1	791
65-69	1	229
70-74		
75+		
Total	7	602

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	40
55-59		
60-64	2	131
65-69	4	225
70-74	3	1,042
75-79	1	734
80-84	1	593
85-89	1	40
90-94	1	18
95-99		
100+		
Total	14	408

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

City of Sweet Home/2129
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
City of Sweet Home/2129

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

City of Sweet Home -- #2129

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Sweet Home 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 City of Sweet Home.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Sweet Home

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.16%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(11.69%)	(11.69%)	(11.69%)
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%**	**0.36%**
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%**	**0.81%**

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 127%.

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	$5,349,083	$5,001,138	($347,945)	107%	$803,558	(43%)
12/31/2009	6,230,307	5,371,122	(859,185)	116%	817,510	(105%)
12/31/2010	6,905,331	5,733,310	(1,172,021)	120%	860,986	(136%)
12/31/2011	6,785,370	6,077,241	(708,129)	112%	636,038	(111%)
12/31/2012	7,035,389	5,996,351	(1,039,038)	117%	770,371	(135%)
12/31/2013	7,787,332	6,150,297	(1,637,035)	127%	764,975	(214%)

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.

City of Sweet Home

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($1,637,035)	($1,039,038)
Allocated pooled OPSRP UAL	54,088	54,298
Side account	0	0
Net unfunded pension actuarial accrued liability	(1,582,947)	(984,740)
Combined valuation payroll	764,975	770,371
Net pension UAL as a percentage of payroll	(207%)	(128%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$10,588	$16,163

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	$66,726	$63,461
Tier 1/Tier 2 valuation payroll	473,381	453,422
Tier 1/Tier 2 pension normal cost rate	17.16%	15.07%
Tier 1/ Tier 2 Actuarial accrued liability	$6,150,297	$5,996,351
Actuarial asset value	7,787,332	7,035,389
Tier 1/Tier 2 Unfunded actuarial accrued liability	(1,637,035)	(1,039,038)
Tier 1/ Tier 2 Funded status	127%	117%
Combined valuation payroll	$764,975	$770,371
Tier 1/Tier 2 UAL as a percentage of payroll	(214%)	(135%)
Tier 1/Tier 2 UAL rate	(11.69%)	(9.63%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	7	7
Tier 1/Tier 2 dormant members	4	6
Tier 1/Tier 2 retirees and beneficiaries	15	12

[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	764,975	770,371
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]	$986,606	$1,038,590
2. Employer reserves	4,976,969	4,467,566
3. Benefits in force reserve	1,823,758	1,529,233
4. Total market value of assets ***(1. + 2. + 3.)***	**$7,787,332**	**$7,035,389**

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	$7,035,389
2. Regular employer contributions	(857)
3. Benefit payments and expense	(282,325)
4. Adjustments [2]	14,122
5. Interest credited	1,021,004
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$7,787,332**

[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	$12,316	$11,639
Tier 1 General Service	0	0
Tier 2 Police & Fire	47,144	44,876
Tier 2 General Service	7,266	6,946
Total	**$66,726**	**$63,461**

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	$66,726	$66,726	$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

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

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	**December 31, 2012**
Active Members		
▪ Tier 1 Police & Fire	$1,523,608	$1,692,811
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	1,350,349	1,218,398
▪ Tier 2 General Service	133,415	117,333
▪ **Total Active Members**	**$3,007,372**	**$3,028,542**
Dormant Members	203,091	390,841
Retired Members and Beneficiaries	2,939,834	2,576,968
Total Actuarial Accrued Liability	**$6,150,297**	**$5,996,351**

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	$6,150,297	$6,150,297	$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	$6,150,297	$5,996,351
2. Actuarial value of assets	7,787,332	7,035,389
3. Unfunded accrued liability *(1. – 2.)*	(1,637,035)	(1,039,038)
4. Funded percentage *(2. ÷ 1.)*	127%	117%
5. Combined valuation payroll	$764,975	$770,371
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(214%)	(135%)

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	($1,637,035)	($118,488)
Total				**($1,637,035)**	**($118,488)**

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	$5,996,351
b. Normal cost at December 31, 2012	63,461
c. Benefit payments during 2013	(280,086)
d. Interest at 7.75% to December 31, 2013	458,782
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	6,238,508
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.)*	6,238,508
2. Actuarial accrued liability at December 31, 2013	6,150,297
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	88,211
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	7,035,389
b. Contributions for 2013[1]	(857)
c. Benefit payments and expenses during 2013	(282,325)
d. Interest at 7.75% to December 31, 2013	534,269
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	7,286,476
5. Actuarial value of assets at December 31, 2013	7,787,332
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	500,857
7. Total actuarial gain/(loss) *(3. + 6.)*	**$589,068**

Unfunded Accrued Liability Reconciliation

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

1. UAL at December 31, 2012	**($1,039,038)**
2. Expected increase	(8,929)
3. Liability (gain)/loss	(88,211)
4. Asset (gain)/loss	(500,857)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($1,637,035)**

[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	$12,316	$74,641	16.50%	$11,639	$71,552	16.27%
Tier 1 General Service	0	0	0.00%	0	0	0.00%
Tier 2 Police & Fire	47,144	324,075	14.55%	44,876	309,560	14.50%
Tier 2 General Service	7,266	74,665	9.73%	6,946	72,310	9.61%
Total	**$66,726**	**$473,381**	**14.10%**	**$63,461**	**$453,422**	**14.00%**

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	($1,637,035)	($1,039,038)
2. Next year's Tier 1/Tier 2 UAL payment	(118,488)	(75,205)
3. Combined valuation payroll	764,975	770,371
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(15.49%)	(9.76%)

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	14.10%	14.00%
b. Tier 1/Tier 2 UAL rate	(15.49%)	(9.76%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	(1.24%)	4.37%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

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

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

1. Current net Tier 1/Tier 2 pension contribution rate	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	127%
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	(1.24%)
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	3.65%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(15.49%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(11.84%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	2.41%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	3.06%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	14.10%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.16%
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	17.16%	15.07%
b. Tier 1/Tier 2 UAL rate	(11.84%)	(9.76%)
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	$74,641	$74,641
Tier 2	74,665	324,075	398,740
Tier 1/Tier 2 valuation payroll	74,665	398,716	473,381
OPSRP valuation payroll	0	291,594	291,594
Combined valuation payroll	**$74,665**	**$690,310**	**$764,975**

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	5	5	11	1	5	6	12
Total	1	6	5	12	1	6	6	13
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	16	13	N/A	29	12	8	N/A	20
Total	16	13	N/A	29	12	8	N/A	20
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	3	1	1	5	4	2	1	7
Total	3	1	1	5	4	2	1	7
Retired Members and Beneficiaries								
General Service	0	0	0	0	0	0	0	0
Police & Fire	15	0	0	15	12	0	0	12
Total	15	0	0	15	12	0	0	12
Grand Total Number of Members	**35**	**20**	**6**	**61**	**29**	**16**	**7**	**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	1						3
40-44		1	2	1						4
45-49										
50-54										
55-59										
60-64										
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	1	35
35-39		
40-44		
45-49	1	1,025
50-54		
55-59	2	393
60-64		
65-69		
70-74		
75+		
Total	4	462

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	96
55-59	4	2,251
60-64	4	881
65-69	6	937
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	15	1,216

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

City of Waldport/2261
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
City of Waldport/2261

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

City of Waldport -- #2261

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Waldport 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 City of Waldport.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Waldport

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.05%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(5.36%)	(5.36%)	(5.36%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.30%**	**2.58%**	**6.69%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**8.83%**	**3.03%**	**7.14%**

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 115%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	7.69%	7.69%
Minimum July 1, 2017 Rate	4.69%	1.69%
Maximum July 1, 2017 Rate	10.69%	13.69%

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	$2,413,499	$2,554,725	$141,226	94%	$617,388	23%
12/31/2009	2,741,234	2,692,200	(49,034)	102%	649,400	(8%)
12/31/2010	2,981,867	2,802,015	(179,852)	106%	636,529	(28%)
12/31/2011	2,991,828	2,932,896	(58,932)	102%	640,777	(9%)
12/31/2012	3,384,024	3,149,005	(235,019)	107%	689,451	(34%)
12/31/2013	3,784,497	3,288,088	(496,409)	115%	651,864	(76%)

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.

City of Waldport

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($496,409)	($235,019)
Allocated pooled OPSRP UAL	46,091	48,594
Side account	0	0
Net unfunded pension actuarial accrued liability	(450,318)	(186,425)
Combined valuation payroll	651,864	689,451
Net pension UAL as a percentage of payroll	(69%)	(27%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$9,022	$14,465

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	$62,994	$68,486
Tier 1/Tier 2 valuation payroll	482,743	538,990
Tier 1/Tier 2 pension normal cost rate	13.05%	12.71%
Tier 1/ Tier 2 Actuarial accrued liability	$3,288,088	$3,149,005
Actuarial asset value	3,784,497	3,384,024
Tier 1/Tier 2 Unfunded actuarial accrued liability	(496,409)	(235,019)
Tier 1/ Tier 2 Funded status	115%	107%
Combined valuation payroll	$651,864	$689,451
Tier 1/Tier 2 UAL as a percentage of payroll	(76%)	(34%)
Tier 1/Tier 2 UAL rate	(5.36%)	(2.86%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	9	10
Tier 1/Tier 2 dormant members	5	5
Tier 1/Tier 2 retirees and beneficiaries	20	18

[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	651,864	689,451
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]	$608,598	$600,251
2. Employer reserves	2,384,417	2,099,743
3. Benefits in force reserve	791,483	684,030
4. Total market value of assets *(1. + 2. + 3.)*	**$3,784,497**	**$3,384,024**

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	$3,384,024
2.	Regular employer contributions	36,004
3.	Benefit payments and expense	(122,525)
4.	Adjustments[2]	6,233
5.	Interest credited	480,761
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$3,784,497**

[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	38,133	45,314
Tier 2 Police & Fire	0	0
Tier 2 General Service	24,861	23,172
Total	**$62,994**	**$68,486**

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	$62,994	$62,994	$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	$118,234	$221,456
▪ Tier 1 General Service	715,593	918,429
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	381,790	450,344
▪ **Total Active Members**	**$1,215,617**	**$1,590,229**
Dormant Members	796,629	406,090
Retired Members and Beneficiaries	1,275,842	1,152,686
Total Actuarial Accrued Liability	**$3,288,088**	**$3,149,005**

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	$3,288,088	$3,288,088	$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	$3,288,088	$3,149,005
2. Actuarial value of assets	3,784,497	3,384,024
3. Unfunded accrued liability *(1. – 2.)*	(496,409)	(235,019)
4. Funded percentage *(2. ÷ 1.)*	115%	107%
5. Combined valuation payroll	$651,864	$689,451
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(76%)	(34%)

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	($496,409)	($35,930)
Total				**($496,409)**	**($35,930)**

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	$3,149,005
b. Normal cost at December 31, 2012	68,486
c. Benefit payments during 2013	(121,553)
d. Interest at 7.75% to December 31, 2013	244,645
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	3,340,583
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.)*	3,340,583
2. Actuarial accrued liability at December 31, 2013	3,288,088
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	52,495
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	3,384,024
b. Contributions for 2013[1]	36,004
c. Benefit payments and expenses during 2013	(122,525)
d. Interest at 7.75% to December 31, 2013	258,909
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	3,556,413
5. Actuarial value of assets at December 31, 2013	3,784,497
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	228,085
7. Total actuarial gain/(loss) *(3. + 6.)*	**$280,580**

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	**($235,019)**
2. Expected increase	19,190
3. Liability (gain)/loss	(52,495)
4. Asset (gain)/loss	(228,085)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($496,409)**

[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	38,133	296,950	12.84%	45,314	361,568	12.53%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	24,861	185,793	13.38%	23,172	177,422	13.06%
Total	**$62,994**	**$482,743**	**13.05%**	**$68,486**	**$538,990**	**12.71%**

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	($496,409)	($235,019)
2. Next year's Tier 1/Tier 2 UAL payment	(35,930)	(17,011)
3. Combined valuation payroll	651,864	689,451
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(5.51%)	(2.47%)

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	13.05%	12.71%
b. Tier 1/Tier 2 UAL rate	(5.51%)	(2.47%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	7.69%	10.37%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

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

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

1. Current net Tier 1/Tier 2 pension contribution rate	6.85%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	6.85%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.37%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	115%
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%)*	3.85%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	9.85%
7. July 1, 2015 total pension rate, before adjustment	7.69%
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	(5.51%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(5.51%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	7.69%
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	13.05%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.05%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	7.69%

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	13.05%	12.71%
b. Tier 1/Tier 2 UAL rate	(5.51%)	(2.99%)
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%)*	7.69%	9.85%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$296,950	$0	$296,950
Tier 2	185,793	0	185,793
Tier 1/Tier 2 valuation payroll	482,743	0	482,743
OPSRP valuation payroll	169,121	0	169,121
Combined valuation payroll	**$651,864**	**$0**	**$651,864**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	6	3	6	15	7	3	5	15
Police & Fire	0	0	0	0	0	0	0	0
Total	6	3	6	15	7	3	5	15
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	1	N/A	1
Police & Fire	3	0	N/A	3	3	0	N/A	3
Total	3	0	N/A	3	3	1	N/A	4
Dormant Members								
General Service	4	0	0	4	3	0	0	3
Police & Fire	1	0	0	1	1	1	0	2
Total	5	0	0	5	4	1	0	5
Retired Members and Beneficiaries								
General Service	10	3	0	13	10	2	0	12
Police & Fire	7	0	0	7	6	0	0	6
Total	17	3	0	20	16	2	0	18
Grand Total Number of Members	**31**	**6**	**6**	**43**	**30**	**7**	**5**	**42**

[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	3	1					**5**
60-64				1	1					**2**
65-69			1							**1**
70-74										
75+										
Total	**0**	**0**	**2**	**5**	**2**	**0**	**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		
50-54	1	2,735
55-59	2	551
60-64	2	1,335
65-69		
70-74		
75+		
Total	5	1,302

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	842
55-59	1	327
60-64	3	361
65-69	7	527
70-74	3	387
75-79		
80-84	4	621
85-89	1	885
90-94		
95-99		
100+		
Total	20	523

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

City of Weston/2206
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
City of Weston/2206

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

City of Weston -- #2206

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Weston 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 City of Weston.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Weston

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.19%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(3.70%)	(3.70%)	(3.70%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.10%**	**4.24%**	**8.35%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**8.63%**	**4.69%**	**8.80%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

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

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	7.49%	7.49%
Minimum July 1, 2017 Rate	4.49%	1.49%
Maximum July 1, 2017 Rate	10.49%	13.49%

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	$901,552	$792,864	($108,688)	114%	$175,726	(62%)
12/31/2009	1,007,845	738,301	(269,544)	137%	142,131	(190%)
12/31/2010	1,105,508	853,708	(251,800)	129%	189,752	(133%)
12/31/2011	948,286	1,032,925	84,639	92%	239,512	35%
12/31/2012	1,018,294	1,000,088	(18,206)	102%	206,346	(9%)
12/31/2013	1,060,141	942,142	(117,999)	113%	221,924	(53%)

Retiree Healthcare

The Retiree Health Insurance Account (RHIA) is a cost-sharing pool under Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). Consequently, each employer reports the contractually required contribution. The contractually required contribution for retiree healthcare liabilities for the period July 1, 2015 through June 30, 2017 was calculated as a part of this valuation, and is expressed as contribution rates that are applied to the appropriate payroll. The rates and appropriate payroll are shown in the table below.

Contractually Required Contribution Rate

	Payroll		
		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.

City of Weston

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($117,999)	($18,206)
Allocated pooled OPSRP UAL	15,691	14,544
Side account	0	0
Net unfunded pension actuarial accrued liability	(102,308)	(3,662)
Combined valuation payroll	221,924	206,346
Net pension UAL as a percentage of payroll	(46%)	(2%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,072	$4,329

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	$5,094	$4,232
Tier 1/Tier 2 valuation payroll	45,525	37,524
Tier 1/Tier 2 pension normal cost rate	11.19%	11.28%
Tier 1/ Tier 2 Actuarial accrued liability	$942,142	$1,000,088
Actuarial asset value	1,060,141	1,018,294
Tier 1/Tier 2 Unfunded actuarial accrued liability	(117,999)	(18,206)
Tier 1/ Tier 2 Funded status	113%	102%
Combined valuation payroll	$221,924	$206,346
Tier 1/Tier 2 UAL as a percentage of payroll	(53%)	(9%)
Tier 1/Tier 2 UAL rate	(3.70%)	(2.87%)
(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	6	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	221,924	206,346
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	0.00%	0.00%

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

Tier 1/Tier 2 Valuation Results

Assets

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

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

	December 31, 2013	December 31, 2012
1. Member reserves[1]	$102,672	$91,854
2. Employer reserves	547,538	486,308
3. Benefits in force reserve	409,931	440,132
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,060,141**	**$1,018,294**

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	$1,018,294
2.	Regular employer contributions	(12,407)
3.	Benefit payments and expense	(63,459)
4.	Adjustments [2]	(21,526)
5.	Interest credited	139,239
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,060,141**

[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	5,094	4,232
Total	**$5,094**	**$4,232**

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	$5,094	$5,094	$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	$113,863	$104,772
▪ Tier 1 General Service	10,961	10,382
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	156,523	143,251
▪ **Total Active Members**	**$281,347**	**$258,405**
Dormant Members	0	0
Retired Members and Beneficiaries	660,795	741,683
Total Actuarial Accrued Liability	**$942,142**	**$1,000,088**

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	$942,142	$942,142	$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	$942,142	$1,000,088
2. Actuarial value of assets	1,060,141	1,018,294
3. Unfunded accrued liability *(1. – 2.)*	(117,999)	(18,206)
4. Funded percentage *(2. ÷ 1.)*	113%	102%
5. Combined valuation payroll	$221,924	$206,346
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(53%)	(9%)

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	($117,999)	($8,541)
Total				**($117,999)**	**($8,541)**

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	$1,000,088
b. Normal cost at December 31, 2012	4,232
c. Benefit payments during 2013	(62,956)
d. Interest at 7.75% to December 31, 2013	75,395
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,016,759
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.)*	1,016,759
2. Actuarial accrued liability at December 31, 2013	942,142
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	74,617
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,018,294
b. Contributions for 2013[1]	(12,407)
c. Benefit payments and expenses during 2013	(63,459)
d. Interest at 7.75% to December 31, 2013	75,978
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,018,406
5. Actuarial value of assets at December 31, 2013	1,060,141
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	41,735
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$116,352**

Unfunded Accrued Liability Reconciliation

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

1. UAL at December 31, 2012	**($18,206)**
2. Expected increase	16,559
3. Liability (gain)/loss	(74,617)
4. Asset (gain)/loss	(41,735)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($117,999)**

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	5,094	45,525	11.19%	4,232	37,524	11.28%
Total	**$5,094**	**$45,525**	**11.19%**	**$4,232**	**$37,524**	**11.28%**

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	($117,999)	($18,206)
2. Next year's Tier 1/Tier 2 UAL payment	(8,541)	(1,318)
3. Combined valuation payroll	221,924	206,346
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(3.85%)	(0.64%)

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	11.19%	11.28%
b. Tier 1/Tier 2 UAL rate	(3.85%)	(0.64%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	7.49%	10.77%

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	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	113%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	3.00%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	2.41%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	8.41%
7. July 1, 2015 total pension rate, before adjustment	7.49%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(3.85%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(3.85%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	7.49%
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	11.19%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.19%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	7.49%

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	11.19%	11.28%
b. Tier 1/Tier 2 UAL rate	(3.85%)	(3.00%)
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%)*	7.49%	8.41%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	45,525	0	45,525
Tier 1/Tier 2 valuation payroll	45,525	0	45,525
OPSRP valuation payroll	120,973	55,426	176,399
Combined valuation payroll	**$166,498**	**$55,426**	**$221,924**

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	1	1	0	0	1	1
Total	0	1	4	5	0	1	4	5
Active Members with previous service segments with the employer								
General Service	1	2	N/A	3	0	1	N/A	1
Police & Fire	1	0	N/A	1	0	0	N/A	0
Total	2	2	N/A	4	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	2	1	0	3	3	1	0	4
Police & Fire	2	1	0	3	2	1	0	3
Total	4	2	0	6	5	2	0	7
Grand Total Number of Members	**6**	**5**	**4**	**15**	**5**	**4**	**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										
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	1	257
60-64	2	1,681
65-69	3	204
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	6	705

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

City of Willamina/2189
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
City of Willamina/2189

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

City of Willamina -- #2189

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for City of Willamina 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 City of Willamina.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for City of Willamina

	Payroll		
		OPSRP	
	Tier 1/Tier 2	**General Service**	**Police & Fire**
Pension			
Normal cost rate	14.69%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(9.22%)	(9.22%)	(9.22%)
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%**	**2.83%**
Retiree Healthcare			
Normal cost rate	0.08%	0.00%	0.00%
UAL rate	0.45%	0.45%	0.45%
Net retiree healthcare rate	**0.53%**	**0.45%**	**0.45%**
Total net employer contribution rate	**6.61%**	**0.45%**	**3.28%**

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

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

Executive Summary

Employer Contribution Rates (continued)

Range of Potential Tier 1/Tier 2 Employer Pension Contribution Rates for the July 2017 to June 2019 Biennium

The rate collar limits changes in contribution rates, but does not limit changes in rates for individual employers related to side accounts. The table below shows the possible minimum and maximum rates first effective as of July 1, 2017, which will depend on the funded status as of December 31, 2015. If the employer's funded status excluding side accounts is less than 60 percent or greater than 140 percent, the rate collar doubles in size. If the employer's funded status excluding side accounts is between 60 and 70 percent or between 130 and 140 percent, the size of the rate collar is increased on a graded scale. Also, please note that by Board policy, independent employers with less than 2,500 employees cannot have a Tier 1/Tier 2 pension rate less than 6 percent of payroll (excludes side accounts and OPSRP UAL rates). The rates shown are before any adjustment for side account offsets or the 6 percent minimum independent employer contribution rate.

For comparison, the funded status as of December 31, 2013 is 167%.

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	$1,760,004	$1,113,927	($646,077)	158%	$205,155	(315%)
12/31/2009	2,035,372	1,205,530	(829,842)	169%	269,485	(308%)
12/31/2010	2,130,802	1,190,844	(939,958)	179%	289,477	(325%)
12/31/2011	2,108,150	1,299,674	(808,476)	162%	315,834	(256%)
12/31/2012	2,290,038	1,461,888	(828,150)	157%	304,738	(272%)
12/31/2013	2,532,731	1,515,499	(1,017,232)	167%	267,216	(381%)

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.

City of Willamina

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($1,017,232)	($828,150)
Allocated pooled OPSRP UAL	18,894	21,479
Side account	0	0
Net unfunded pension actuarial accrued liability	(998,338)	(806,671)
Combined valuation payroll	267,216	304,738
Net pension UAL as a percentage of payroll	(374%)	(265%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,699	$6,394

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	$10,409	$19,281
Tier 1/Tier 2 valuation payroll	112,884	162,077
Tier 1/Tier 2 pension normal cost rate	14.69%	17.34%
Tier 1/ Tier 2 Actuarial accrued liability	$1,515,499	$1,461,888
Actuarial asset value	2,532,731	2,290,038
Tier 1/Tier 2 Unfunded actuarial accrued liability	(1,017,232)	(828,150)
Tier 1/ Tier 2 Funded status	167%	157%
Combined valuation payroll	$267,216	$304,738
Tier 1/Tier 2 UAL as a percentage of payroll	(381%)	(272%)
Tier 1/Tier 2 UAL rate	(9.22%)	(11.90%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	5	5
Tier 1/Tier 2 dormant members	4	4
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	267,216	304,738
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]	$179,217	$270,336
2. Employer reserves	1,811,360	1,610,514
3. Benefits in force reserve	542,154	409,188
4. Total market value of assets *(1. + 2. + 3.)*	**$2,532,731**	**$2,290,038**

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	$2,290,038
2. Regular employer contributions	(223)
3. Benefit payments and expense	(83,928)
4. Adjustments[2]	(10,096)
5. Interest credited	336,939
6. Total transferred from side accounts	0
7. Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)*	**$2,532,731**

[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	9,188
Tier 2 Police & Fire	0	0
Tier 2 General Service	10,409	10,093
Total	**$10,409**	**$19,281**

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	$10,409	$10,409	$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	$79,306
▪ Tier 1 General Service	215,955	301,676
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	257,249	233,935
▪ **Total Active Members**	**$473,204**	**$614,917**
Dormant Members	168,362	157,432
Retired Members and Beneficiaries	873,933	689,539
Total Actuarial Accrued Liability	**$1,515,499**	**$1,461,888**

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	$1,515,499	$1,515,499	$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	$1,515,499	$1,461,888
2. Actuarial value of assets	2,532,731	2,290,038
3. Unfunded accrued liability *(1. – 2.)*	(1,017,232)	(828,150)
4. Funded percentage *(2. ÷ 1.)*	167%	157%
5. Combined valuation payroll	$267,216	$304,738
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(381%)	(272%)

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	($1,017,232)	($73,627)
Total				**($1,017,232)**	**($73,627)**

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	$1,461,888
b. Normal cost at December 31, 2012	19,281
c. Benefit payments during 2013	(83,262)
d. Interest at 7.75% to December 31, 2013	111,564
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,509,471
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.)*	1,509,471
2. Actuarial accrued liability at December 31, 2013	1,515,499
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(6,028)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	2,290,038
b. Contributions for 2013[1]	(223)
c. Benefit payments and expenses during 2013	(83,928)
d. Interest at 7.75% to December 31, 2013	174,217
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	2,380,104
5. Actuarial value of assets at December 31, 2013	2,532,731
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	152,626
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$146,598**

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	**($828,150)**
2. Expected increase	(42,484)
3. Liability (gain)/loss	6,028
4. Asset (gain)/loss	(152,626)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($1,017,232)**

[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%	9,188	50,694	18.12%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	10,409	112,884	9.22%	10,093	111,383	9.06%
Total	**$10,409**	**$112,884**	**9.22%**	**$19,281**	**$162,077**	**11.90%**

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	($1,017,232)	($828,150)
2. Next year's Tier 1/Tier 2 UAL payment	(73,627)	(59,941)
3. Combined valuation payroll	267,216	304,738
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(27.55%)	(19.67%)

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	9.22%	11.90%
b. Tier 1/Tier 2 UAL rate	(27.55%)	(19.67%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	(18.18%)	(7.64%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Adjustments Due to Rate Collar and Minimum Rate Requirements

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

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

1. Current net Tier 1/Tier 2 pension contribution rate	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	167%
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	(18.18%)
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	18.18%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(27.55%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(9.37%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	0.00%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	5.47%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	9.22%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.69%
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	14.69%	17.34%
b. Tier 1/Tier 2 UAL rate	(9.37%)	(12.03%)
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%)*	5.47%	5.44%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	112,884	0	112,884
Tier 1/Tier 2 valuation payroll	112,884	0	112,884
OPSRP valuation payroll	154,332	0	154,332
Combined valuation payroll	**$267,216**	**$0**	**$267,216**

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	3	4	9	2	3	4	9
Police & Fire	0	0	0	0	0	0	0	0
Total	2	3	4	9	2	3	4	9
Active Members with previous service segments with the employer								
General Service	3	1	N/A	4	4	1	N/A	5
Police & Fire	0	0	N/A	0	1	0	N/A	1
Total	3	1	N/A	4	5	1	N/A	6
Dormant Members								
General Service	1	3	0	4	1	3	0	4
Police & Fire	0	0	0	0	0	0	0	0
Total	1	3	0	4	1	3	0	4
Retired Members and Beneficiaries								
General Service	6	0	0	6	5	0	0	5
Police & Fire	7	0	0	7	6	0	0	6
Total	13	0	0	13	11	0	0	11
Grand Total Number of Members	**19**	**7**	**4**	**30**	**19**	**7**	**4**	**30**

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

Data

Demographic Information (continued)

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

Age	Years of Service 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										
40-44										
45-49			1	1						**2**
50-54										
55-59										
60-64										
65-69										
70-74				1	1					**2**
75+										
Total	**0**	**0**	**2**	**2**	**1**	**0**	**0**	**0**	**0**	**5**

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	232
50-54		
55-59	2	509
60-64	1	65
65-69		
70-74		
75+		
Total	4	329

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	326
55-59	3	331
60-64	3	254
65-69	2	1,353
70-74	3	265
75-79	1	158
80-84		
85-89		
90-94		
95-99		
100+		
Total	13	442

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

Clackamas County Housing Authority/2518
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
Clackamas County Housing Authority/2518

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

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

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

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

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

September 2014
Clackamas County Housing Authority/2518

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

Clackamas County Housing Authority -- #2518

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Clackamas County 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 Clackamas County 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 Clackamas County Housing Authority

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	14.06%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	2.44%	2.44%	2.44%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**17.11%**	**10.38%**	**14.49%**
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	**17.64%**	**10.83%**	**14.94%**

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 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	16.50%	16.50%
Minimum July 1, 2017 Rate	13.20%	9.90%
Maximum July 1, 2017 Rate	19.80%	23.10%

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	$8,613,000	$11,233,387	$2,620,387	77%	$1,759,585	149%
12/31/2009	9,659,189	11,443,624	1,784,435	84%	2,068,743	86%
12/31/2010	10,112,860	12,051,368	1,938,508	84%	2,099,623	92%
12/31/2011	10,097,984	12,671,485	2,573,501	80%	2,168,456	119%
12/31/2012	11,306,674	12,635,796	1,329,122	89%	2,138,503	62%
12/31/2013	12,525,314	13,459,586	934,272	93%	2,141,926	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.

Clackamas County Housing Authority

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$934,272	$1,329,122
Allocated pooled OPSRP UAL	151,447	150,728
Side account	0	0
Net unfunded pension actuarial accrued liability	1,085,719	1,479,850
Combined valuation payroll	2,141,926	2,138,503
Net pension UAL as a percentage of payroll	51%	69%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$29,647	$44,867

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	$208,474	$226,262
Tier 1/Tier 2 valuation payroll	1,482,720	1,576,699
Tier 1/Tier 2 pension normal cost rate	14.06%	14.35%
Tier 1/ Tier 2 Actuarial accrued liability	$13,459,586	$12,635,796
Actuarial asset value	12,525,314	11,306,674
Tier 1/Tier 2 Unfunded actuarial accrued liability	934,272	1,329,122
Tier 1/ Tier 2 Funded status	93%	89%
Combined valuation payroll	$2,141,926	$2,138,503
Tier 1/Tier 2 UAL as a percentage of payroll	44%	62%
Tier 1/Tier 2 UAL rate	2.44%	2.15%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	27	30
Tier 1/Tier 2 dormant members	8	9
Tier 1/Tier 2 retirees and beneficiaries	42	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	2,141,926	2,138,503
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]	$1,837,937	$1,956,816
2. Employer reserves	6,123,684	5,436,626
3. Benefits in force reserve	4,563,693	3,913,232
4. Total market value of assets ***(1. + 2. + 3.)***	**$12,525,314**	**$11,306,674**

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	$11,306,674
2.	Regular employer contributions	230,798
3.	Benefit payments and expense	(706,479)
4.	Adjustments [2]	66,286
5.	Interest credited	1,628,036
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$12,525,314**

[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	108,498	126,753
Tier 2 Police & Fire	0	0
Tier 2 General Service	99,976	99,509
Total	**$208,474**	**$226,262**

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	$208,474	$208,474	$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	2,800,449	2,944,002
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	1,746,757	1,602,560
▪ **Total Active Members**	**$4,547,206**	**$4,546,562**
Dormant Members	1,555,866	1,494,899
Retired Members and Beneficiaries	7,356,514	6,594,335
Total Actuarial Accrued Liability	**$13,459,586**	**$12,635,796**

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	$13,459,586	$13,459,586	$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	$13,459,586	$12,635,796
2. Actuarial value of assets	12,525,314	11,306,674
3. Unfunded accrued liability *(1. – 2.)*	934,272	1,329,122
4. Funded percentage *(2. ÷ 1.)*	93%	89%
5. Combined valuation payroll	$2,141,926	$2,138,503
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	44%	62%

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	$934,272	$67,622
Total				**$934,272**	**$67,622**

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

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

1. Expected actuarial accrued liability	
a. Actuarial accrued liability at December 31, 2012	$12,635,796
b. Normal cost at December 31, 2012	226,262
c. Benefit payments during 2013	(700,875)
d. Interest at 7.75% to December 31, 2013	969,651
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	13,130,834
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.)*	13,130,834
2. Actuarial accrued liability at December 31, 2013	13,459,586
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(328,752)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	11,306,674
b. Contributions for 2013[1]	230,798
c. Benefit payments and expenses during 2013	(706,479)
d. Interest at 7.75% to December 31, 2013	857,835
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	11,688,827
5. Actuarial value of assets at December 31, 2013	12,525,314
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	836,487
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$507,735**

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	**$1,329,122**
2. Expected increase	112,885
3. Liability (gain)/loss	328,752
4. Asset (gain)/loss	(836,487)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$934,272**

[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	108,498	599,687	18.09%	126,753	740,514	17.12%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	99,976	883,033	11.32%	99,509	836,185	11.90%
Total	**$208,474**	**$1,482,720**	**14.06%**	**$226,262**	**$1,576,699**	**14.35%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$934,272	$1,329,122
2. Next year's Tier 1/Tier 2 UAL payment	67,622	96,202
3. Combined valuation payroll	2,141,926	2,138,503
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	3.16%	4.50%

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	14.06%	14.35%
b. Tier 1/Tier 2 UAL rate	3.16%	4.50%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	17.37%	18.98%

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	13.50%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	13.50%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.70%
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%)*	10.50%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	16.50%
7. July 1, 2015 total pension rate, before adjustment	17.37%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.87%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	3.16%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	2.29%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	16.50%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	0.00%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	14.06%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	14.06%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	16.50%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	14.06%	14.35%
b. Tier 1/Tier 2 UAL rate	2.29%	2.02%
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%)*	16.50%	16.50%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$599,687	$0	$599,687
Tier 2	883,033	0	883,033
Tier 1/Tier 2 valuation payroll	1,482,720	0	1,482,720
OPSRP valuation payroll	659,206	0	659,206
Combined valuation payroll	**$2,141,926**	**$0**	**$2,141,926**

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	14	41	13	17	10	40
Police & Fire	0	0	0	0	0	0	0	0
Total	11	16	14	41	13	17	10	40
Active Members with previous service segments with the employer								
General Service	3	5	N/A	8	4	2	N/A	6
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	3	5	N/A	8	4	2	N/A	6
Dormant Members								
General Service	8	0	2	10	9	0	2	11
Police & Fire	0	0	0	0	0	0	0	0
Total	8	0	2	10	9	0	2	11
Retired Members and Beneficiaries								
General Service	35	7	0	42	31	6	0	37
Police & Fire	0	0	0	0	0	0	0	0
Total	35	7	0	42	31	6	0	37
Grand Total Number of Members	**57**	**28**	**16**	**101**	**57**	**25**	**12**	**94**

[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										
40-44			1							**1**
45-49			2	2						**4**
50-54			4	2	1	1				**8**
55-59			1	1		3				**5**
60-64			3	2		1				**6**
65-69			1		1					**2**
70-74										
75+										
Total	**0**	**0**	**13**	**7**	**2**	**5**	**0**	**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		
40-44		
45-49	3	1,988
50-54	2	1,945
55-59	2	2,877
60-64		
65-69	1	323
70-74		
75+		
Total	8	1,991

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	5	1,080
60-64	5	2,010
65-69	15	1,409
70-74	5	965
75-79	7	1,625
80-84	1	251
85-89	2	1,138
90-94	1	6
95-99	1	346
100+		
Total	42	1,325

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

Clackamas County/2001
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
Clackamas County/2001

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
Clackamas County/2001

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

Clackamas County -- #2001

September 2014

Secondary Employers

2045	Clackamas County Service District #1
2791	Clackamas County Fair

CONTENTS

Executive Summary

Milliman has prepared this report for Clackamas 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 Clackamas 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 Clackamas County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.91%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	3.84%	3.84%	3.84%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**18.36%**	**11.78%**	**15.89%**
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	**18.89%**	**12.23%**	**16.34%**

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 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	17.75%	17.75%
Minimum July 1, 2017 Rate	14.20%	10.65%
Maximum July 1, 2017 Rate	21.30%	24.85%

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	$452,197,009	$606,617,813	$154,420,804	75%	$109,890,242	141%
12/31/2009	513,839,640	635,968,542	122,128,902	81%	113,373,891	108%
12/31/2010	548,929,719	669,985,910	121,056,191	82%	119,256,210	102%
12/31/2011	538,168,129	693,798,252	155,630,123	78%	119,485,687	130%
12/31/2012	590,126,155	690,218,356	100,092,201	86%	123,609,884	81%
12/31/2013	647,928,769	720,844,889	72,916,120	90%	128,333,189	57%

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.

Clackamas County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$72,916,120	$100,092,201
Allocated pooled OPSRP UAL	9,073,938	8,712,365
Side account	0	0
Net unfunded pension actuarial accrued liability	81,990,058	108,804,566
Combined valuation payroll	128,333,189	123,609,884
Net pension UAL as a percentage of payroll	64%	88%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,776,269	$2,593,388

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	$10,345,673	$10,675,197
Tier 1/Tier 2 valuation payroll	74,395,856	75,170,700
Tier 1/Tier 2 pension normal cost rate	13.91%	14.20%
Tier 1/ Tier 2 Actuarial accrued liability	$720,844,889	$690,218,356
Actuarial asset value	647,928,769	590,126,155
Tier 1/Tier 2 Unfunded actuarial accrued liability	72,916,120	100,092,201
Tier 1/ Tier 2 Funded status	90%	86%
Combined valuation payroll	$128,333,189	$123,609,884
Tier 1/Tier 2 UAL as a percentage of payroll	57%	81%
Tier 1/Tier 2 UAL rate	3.84%	3.55%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	961	1,028
Tier 1/Tier 2 dormant members	556	596
Tier 1/Tier 2 retirees and beneficiaries	1,800	1,681

[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	128,333,189	123,609,884
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	0.00%	0.00%

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

Tier 1/Tier 2 Valuation Results

Assets

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

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

	December 31, 2013	December 31, 2012
1. Member reserves[1]	$87,527,517	$92,398,973
2. Employer reserves	289,935,173	258,304,332
3. Benefits in force reserve	270,466,079	239,422,850
4. Total market value of assets ***(1. + 2. + 3.)***	**$647,928,769**	**$590,126,155**

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	$590,126,155
2.	Regular employer contributions	13,220,152
3.	Benefit payments and expense	(41,869,283)
4.	Adjustments [2]	1,145,562
5.	Interest credited	85,306,183
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$647,928,769**

[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	$2,162,214	$2,186,091
Tier 1 General Service	3,807,032	4,228,696
Tier 2 Police & Fire	1,534,467	1,473,554
Tier 2 General Service	2,841,960	2,786,856
Total	**$10,345,673**	**$10,675,197**

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	$10,345,673	$10,345,673	$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	$58,842,269	$56,774,890
▪ Tier 1 General Service	110,614,773	117,090,506
▪ Tier 2 Police & Fire	23,535,579	20,900,208
▪ Tier 2 General Service	52,832,726	48,348,812
▪ **Total Active Members**	**$245,825,347**	**$243,114,416**
Dormant Members	39,037,727	43,643,376
Retired Members and Beneficiaries	435,981,815	403,460,564
Total Actuarial Accrued Liability	**$720,844,889**	**$690,218,356**

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	$720,844,889	$720,844,889	$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	$720,844,889	$690,218,356
2. Actuarial value of assets	647,928,769	590,126,155
3. Unfunded accrued liability *(1. – 2.)*	72,916,120	100,092,201
4. Funded percentage *(2. ÷ 1.)*	90%	86%
5. Combined valuation payroll	$128,333,189	$123,609,884
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	57%	81%

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	$72,916,120	$5,277,658
Total				**$72,916,120**	**$5,277,658**

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	$690,218,356
b. Normal cost at December 31, 2012	10,675,197
c. Benefit payments during 2013	(41,537,191)
d. Interest at 7.75% to December 31, 2013	52,709,684
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	712,066,046
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.)*	712,066,046
2. Actuarial accrued liability at December 31, 2013	720,844,889
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(8,778,843)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	590,126,155
b. Contributions for 2013[1]	13,220,152
c. Benefit payments and expenses during 2013	(41,869,283)
d. Interest at 7.75% to December 31, 2013	44,624,623
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	606,101,647
5. Actuarial value of assets at December 31, 2013	647,928,769
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	41,827,122
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$33,048,279**

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	**$100,092,201**
2. Expected increase	5,872,198
3. Liability (gain)/loss	8,778,843
4. Asset (gain)/loss	(41,827,122)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$72,916,120**

[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	$2,162,214	$12,328,442	17.54%	$2,186,091	$12,365,701	17.68%
Tier 1 General Service	3,807,032	25,570,145	14.89%	4,228,696	27,430,469	15.42%
Tier 2 Police & Fire	1,534,467	9,916,213	15.47%	1,473,554	9,519,460	15.48%
Tier 2 General Service	2,841,960	26,581,056	10.69%	2,786,856	25,855,070	10.78%
Total	**$10,345,673**	**$74,395,856**	**13.91%**	**$10,675,197**	**$75,170,700**	**14.20%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$72,916,120	$100,092,201
2. Next year's Tier 1/Tier 2 UAL payment	5,277,658	7,244,658
3. Combined valuation payroll	128,333,189	123,609,884
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	4.11%	5.86%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.91%	14.20%
b. Tier 1/Tier 2 UAL rate	4.11%	5.86%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	18.17%	20.19%

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	14.75%
2.	Employer contribution rate attributable to side accounts	0.00%
3.	Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	14.75%
4.	Size of rate collar	
	a. 20% of current employer contribution rate *(20% x 3.)*	2.95%
	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%)*	11.75%
6.	July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	17.75%
7.	July 1, 2015 total pension rate, before adjustment	18.17%
8.	Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.42%)
9.	July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	4.11%
10.	July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	3.69%
11.	July 1, 2015 Tier 1/Tier 2 pension rate, after collar	17.75%
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	13.91%
15.	July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.91%
16.	July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	17.75%

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	13.91%	14.20%
b. Tier 1/Tier 2 UAL rate	3.69%	3.42%
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%)*	17.75%	17.75%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$25,570,145	$12,328,442	$37,898,587
Tier 2	26,581,056	9,916,213	36,497,269
Tier 1/Tier 2 valuation payroll	52,151,201	22,244,655	74,395,856
OPSRP valuation payroll	41,526,356	12,410,977	53,937,333
Combined valuation payroll	**$93,677,557**	**$34,655,632**	**$128,333,189**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	349	388	787	1,524	390	407	749	1,546
Police & Fire	116	108	153	377	123	108	144	375
Total	465	496	940	1,901	513	515	893	1,921
Active Members with previous service segments with the employer								
General Service	233	175	N/A	408	223	153	N/A	376
Police & Fire	31	33	N/A	64	29	30	N/A	59
Total	264	208	N/A	472	252	183	N/A	435
Dormant Members								
General Service	268	243	92	603	307	238	51	596
Police & Fire	22	23	6	51	25	26	8	59
Total	290	266	98	654	332	264	59	655
Retired Members and Beneficiaries								
General Service	1,383	96	15	1,494	1,283	88	10	1,381
Police & Fire	315	6	1	322	294	16	0	310
Total	1,698	102	16	1,816	1,577	104	10	1,691
Grand Total Number of Members	**2,717**	**1,072**	**1,054**	**4,843**	**2,674**	**1,066**	**962**	**4,702**

[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**
30-34		2	18							**20**
35-39		8	57	21						**86**
40-44		5	67	71	11	1				**155**
45-49		3	66	63	49	6				**187**
50-54		8	49	45	34	15	2			**153**
55-59		4	33	52	56	20	17	2		**184**
60-64		3	24	42	36	18	7	1		**131**
65-69			10	16	9	3				**38**
70-74				2	1					**3**
75+			1		2					**3**
Total	**1**	**33**	**325**	**312**	**198**	**63**	**26**	**3**	**0**	**961**

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	2	58
30-34	15	359
35-39	36	655
40-44	75	1,071
45-49	93	1,138
50-54	83	820
55-59	108	741
60-64	86	911
65-69	32	410
70-74	19	594
75+	7	531
Total	556	845

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	7	1,007
45-49	13	2,331
50-54	35	2,365
55-59	139	2,070
60-64	411	1,922
65-69	490	2,025
70-74	321	1,704
75-79	190	1,467
80-84	112	1,267
85-89	53	925
90-94	20	1,085
95-99	9	498
100+		
Total	1,800	1,796

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

Clackamas River Water Providers/2870
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
Clackamas River Water Providers/2870

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

Clackamas River Water Providers -- #2870

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Clackamas River Water Providers 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 Clackamas River Water Providers.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Clackamas River Water Providers

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	7.14%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.63%	0.63%	0.63%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.38%**	**8.57%**	**12.68%**
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	**8.91%**	**9.02%**	**13.13%**

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 61%.

Funded Status as of December 31, 2015	70% to 130%	Under 60% or Over 140%
July 1, 2015 Normal Cost and Tier 1/Tier 2 UAL Rate	7.77%	7.77%
Minimum July 1, 2017 Rate	4.77%	1.77%
Maximum July 1, 2017 Rate	10.77%	13.77%

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	5,724	6,294	570	91%	137,485	0%
12/31/2012	10,532	18,085	7,553	58%	144,904	5%
12/31/2013	15,764	25,646	9,882	61%	147,680	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.

Clackamas River Water Providers

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$9,882	$7,553
Allocated pooled OPSRP UAL	10,442	10,213
Side account	0	0
Net unfunded pension actuarial accrued liability	20,324	17,766
Combined valuation payroll	147,680	144,904
Net pension UAL as a percentage of payroll	14%	12%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,044	$3,040

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	$5,620	$5,449
Tier 1/Tier 2 valuation payroll	78,707	77,715
Tier 1/Tier 2 pension normal cost rate	7.14%	7.01%
Tier 1/ Tier 2 Actuarial accrued liability	$25,646	$18,085
Actuarial asset value	15,764	10,532
Tier 1/Tier 2 Unfunded actuarial accrued liability	9,882	7,553
Tier 1/ Tier 2 Funded status	61%	58%
Combined valuation payroll	$147,680	$144,904
Tier 1/Tier 2 UAL as a percentage of payroll	7%	5%
Tier 1/Tier 2 UAL rate	0.63%	0.51%
(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	147,680	144,904
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	15,764	10,532
3. Benefits in force reserve	0	0
4. Total market value of assets *(1. + 2. + 3.)*	**$15,764**	**$10,532**

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

Reconciliation of Tier 1/Tier 2 Pension Assets

	December 31, 2012 to December 31, 2013
1. Market value of assets at beginning of year	$10,532
2. Regular employer contributions	3,231
3. Benefit payments and expense	0
4. Adjustments [2]	(174)
5. Interest credited	2,174
6. Total transferred from side accounts	0
7. Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)*	**$15,764**

[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	5,620	5,449
Total	**$5,620**	**$5,449**

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	$5,620	$5,620	$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

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

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	**December 31, 2012**
Active Members		
▪ Tier 1 Police & Fire	$0	$0
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	25,646	18,085
▪ **Total Active Members**	**$25,646**	**$18,085**
Dormant Members	0	0
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$25,646**	**$18,085**

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	$25,646	$25,646	$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	$25,646	$18,085
2. Actuarial value of assets	15,764	10,532
3. Unfunded accrued liability *(1. – 2.)*	9,882	7,553
4. Funded percentage *(2. ÷ 1.)*	61%	58%
5. Combined valuation payroll	$147,680	$144,904
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	7%	5%

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	$9,882	$715
Total				**$9,882**	**$715**

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	$18,085
b. Normal cost at December 31, 2012	5,449
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	1,824
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	25,358
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.)*	25,358
2. Actuarial accrued liability at December 31, 2013	25,646
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(288)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	10,532
b. Contributions for 2013[1]	3,231
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	941
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	14,705
5. Actuarial value of assets at December 31, 2013	15,764
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	1,058
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$770**

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	**$7,553**
2. Expected increase	3,099
3. Liability (gain)/loss	288
4. Asset (gain)/loss	(1,058)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$9,882**

[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	5,620	78,707	7.14%	5,449	77,715	7.01%
Total	**$5,620**	**$78,707**	**7.14%**	**$5,449**	**$77,715**	**7.01%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$9,882	$7,553
2. Next year's Tier 1/Tier 2 UAL payment	715	547
3. Combined valuation payroll	147,680	144,904
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	0.48%	0.38%

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	7.14%	7.01%
b. Tier 1/Tier 2 UAL rate	0.48%	0.38%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	7.77%	7.52%

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	61%
d. Size of rate collar *(If c. < 60% or c. > 140%, 2 x b. If c. is 70%-130%, b. Otherwise, a graded rate between b. and 2 x b.)*	5.70%
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.)*	11.11%
7. July 1, 2015 total pension rate, before adjustment	7.77%
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	0.48%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.48%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	7.77%
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	7.14%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	7.14%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	7.77%

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	7.14%	7.01%
b. Tier 1/Tier 2 UAL rate	0.48%	0.38%
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%)*	7.77%	7.52%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$0	$0	$0
Tier 2	78,707	0	78,707
Tier 1/Tier 2 valuation payroll	78,707	0	78,707
OPSRP valuation payroll	68,973	0	68,973
Combined valuation payroll	**$147,680**	**$0**	**$147,680**

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	0	0	0	0	0	0	0
Total	0	1	1	2	0	1	1	2
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	0	N/A	0	0	0	N/A	0
Dormant Members								
General Service	0	0	0	0	0	0	0	0
Police & Fire	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**	**1**	**2**	**0**	**1**	**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

	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		
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

Columbia River Public Utility District/2679
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
Columbia River Public Utility District/2679

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

Columbia River Public Utility District -- #2679

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Columbia River Public Utility 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 Columbia River Public Utility 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 Columbia River Public Utility District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.33%	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	**13.15%**	**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	**13.68%**	**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 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	12.54%	12.54%
Minimum July 1, 2017 Rate	9.54%	6.54%
Maximum July 1, 2017 Rate	15.54%	18.54%

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	$9,237,840	$11,926,365	$2,688,525	77%	$3,627,190	74%
12/31/2009	10,976,475	12,944,562	1,968,087	85%	3,947,347	50%
12/31/2010	12,073,472	14,110,150	2,036,678	86%	3,977,426	51%
12/31/2011	11,614,143	13,958,378	2,344,235	83%	4,487,797	52%
12/31/2012	12,840,692	14,267,091	1,426,399	90%	4,454,644	32%
12/31/2013	14,273,050	15,360,117	1,087,067	93%	4,038,840	27%

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.

Columbia River Public Utility District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$1,087,067	$1,426,399
Allocated pooled OPSRP UAL	285,571	313,976
Side account	0	0
Net unfunded pension actuarial accrued liability	1,372,638	1,740,375
Combined valuation payroll	4,038,840	4,454,644
Net pension UAL as a percentage of payroll	34%	39%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$55,902	$93,460

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	$260,789	$313,190
Tier 1/Tier 2 valuation payroll	2,301,590	2,486,798
Tier 1/Tier 2 pension normal cost rate	11.33%	12.59%
Tier 1/ Tier 2 Actuarial accrued liability	$15,360,117	$14,267,091
Actuarial asset value	14,273,050	12,840,692
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,087,067	1,426,399
Tier 1/ Tier 2 Funded status	93%	90%
Combined valuation payroll	$4,038,840	$4,454,644
Tier 1/Tier 2 UAL as a percentage of payroll	27%	32%
Tier 1/Tier 2 UAL rate	1.21%	(0.05%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	23	26
Tier 1/Tier 2 dormant members	15	14
Tier 1/Tier 2 retirees and beneficiaries	19	16

[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	4,038,840	4,454,644
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]	$2,727,652	$2,918,117
2. Employer reserves	7,409,896	6,760,848
3. Benefits in force reserve	4,135,502	3,161,727
4. Total market value of assets ***(1. + 2. + 3.)***	**$14,273,050**	**$12,840,692**

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	$12,840,692
2.	Regular employer contributions	280,483
3.	Benefit payments and expense	(640,193)
4.	Adjustments[2]	(90,141)
5.	Interest credited	1,882,209
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$14,273,050**

[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	145,528	202,747
Tier 2 Police & Fire	0	0
Tier 2 General Service	115,261	110,443
Total	**$260,789**	**$313,190**

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	$260,789	$260,789	$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	3,823,954	5,107,525
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	2,030,874	1,943,161
▪ **Total Active Members**	**$5,854,828**	**$7,050,686**
Dormant Members	2,839,005	1,888,459
Retired Members and Beneficiaries	6,666,284	5,327,946
Total Actuarial Accrued Liability	**$15,360,117**	**$14,267,091**

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	$15,360,117	$15,360,117	$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	$15,360,117	$14,267,091
2. Actuarial value of assets	14,273,050	12,840,692
3. Unfunded accrued liability *(1. – 2.)*	1,087,067	1,426,399
4. Funded percentage *(2. ÷ 1.)*	93%	90%
5. Combined valuation payroll	$4,038,840	$4,454,644
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	27%	32%

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	$1,087,067	$78,682
Total				**$1,087,067**	**$78,682**

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	$14,267,091
b. Normal cost at December 31, 2012	313,190
c. Benefit payments during 2013	(635,115)
d. Interest at 7.75% to December 31, 2013	1,105,361
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	15,050,527
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.)*	15,050,527
2. Actuarial accrued liability at December 31, 2013	15,360,117
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(309,590)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	12,840,692
b. Contributions for 2013[1]	280,483
c. Benefit payments and expenses during 2013	(640,193)
d. Interest at 7.75% to December 31, 2013	981,215
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	13,462,197
5. Actuarial value of assets at December 31, 2013	14,273,050
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	810,853
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$501,263**

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	**$1,426,399**
2. Expected increase	161,931
3. Liability (gain)/loss	309,590
4. Asset (gain)/loss	(810,853)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$1,087,067**

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	$0	$0	0.00%	$0	$0	0.00%
Tier 1 General Service	145,528	1,154,397	12.61%	202,747	1,434,461	14.13%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	115,261	1,147,193	10.05%	110,443	1,052,337	10.50%
Total	**$260,789**	**$2,301,590**	**11.33%**	**$313,190**	**$2,486,798**	**12.59%**

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	$1,087,067	$1,426,399
2. Next year's Tier 1/Tier 2 UAL payment	78,682	103,243
3. Combined valuation payroll	4,038,840	4,454,644
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	1.95%	2.32%

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	11.33%	12.59%
b. Tier 1/Tier 2 UAL rate	1.95%	2.32%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	13.43%	15.04%

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	9.54%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	9.54%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.91%
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%)*	6.54%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	12.54%
7. July 1, 2015 total pension rate, before adjustment	13.43%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.89%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	1.95%
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	12.54%
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	11.33%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.33%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	12.54%

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	11.33%	12.59%
b. Tier 1/Tier 2 UAL rate	1.06%	(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%)*	12.54%	12.54%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$1,154,397	$0	$1,154,397
Tier 2	1,147,193	0	1,147,193
Tier 1/Tier 2 valuation payroll	2,301,590	0	2,301,590
OPSRP valuation payroll	1,737,250	0	1,737,250
Combined valuation payroll	**$4,038,840**	**$0**	**$4,038,840**

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	12	21	44	14	12	24	50
Police & Fire	0	0	0	0	0	0	0	0
Total	11	12	21	44	14	12	24	50
Active Members with previous service segments with the employer								
General Service	0	2	N/A	2	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	0	2	N/A	2	0	0	N/A	0
Dormant Members								
General Service	7	8	1	16	7	7	0	14
Police & Fire	0	0	0	0	0	0	0	0
Total	7	8	1	16	7	7	0	14
Retired Members and Beneficiaries								
General Service	18	1	0	19	15	1	0	16
Police & Fire	0	0	0	0	0	0	0	0
Total	18	1	0	19	15	1	0	16
Grand Total Number of Members	**36**	**23**	**22**	**81**	**36**	**20**	**24**	**80**

[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			4	2						**6**
45-49			2	1		1				**4**
50-54			1	1	1					**3**
55-59			3	2	2	2	1			**10**
60-64										
65-69										
70-74										
75+										
Total	**0**	**0**	**10**	**6**	**3**	**3**	**1**	**0**	**0**	**23**

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	928
40-44	2	1,293
45-49	4	1,892
50-54	3	1,433
55-59	3	2,343
60-64	1	7,273
65-69		
70-74		
75+		
Total	15	2,041

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	1	3,079
55-59	4	2,383
60-64	4	3,202
65-69	5	3,047
70-74	3	909
75-79	1	262
80-84	1	410
85-89		
90-94		
95-99		
100+		
Total	19	2,319

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

Curry County/2002
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
Curry County/2002

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
Curry County/2002

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

Curry County -- #2002

September 2014

Secondary Employers

2034 Curry County General Hospital

CONTENTS

Executive Summary

Milliman has prepared this report for Curry 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 Curry 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 Curry County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	17.88%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(0.83%)	(0.83%)	(0.83%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**17.66%**	**7.11%**	**11.22%**
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	**18.19%**	**7.56%**	**11.67%**

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 94%.

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	17.05%	17.05%
Minimum July 1, 2017 Rate	13.64%	10.23%
Maximum July 1, 2017 Rate	20.46%	23.87%

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	$37,521,676	$48,686,859	$11,165,183	77%	$7,358,990	152%
12/31/2009	42,368,434	51,342,325	8,973,891	83%	8,625,316	104%
12/31/2010	44,773,178	52,653,513	7,880,335	85%	8,242,417	96%
12/31/2011	43,857,781	53,518,685	9,660,904	82%	6,452,202	150%
12/31/2012	47,011,256	51,970,582	4,959,326	90%	5,808,820	85%
12/31/2013	50,448,321	53,837,333	3,389,012	94%	4,485,910	76%

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.

Curry County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$3,389,012	$4,959,326
Allocated pooled OPSRP UAL	317,181	409,422
Side account	0	0
Net unfunded pension actuarial accrued liability	3,706,193	5,368,748
Combined valuation payroll	4,485,910	5,808,820
Net pension UAL as a percentage of payroll	83%	92%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$62,090	$121,872

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	$448,280	$539,024
Tier 1/Tier 2 valuation payroll	2,506,879	3,102,426
Tier 1/Tier 2 pension normal cost rate	17.88%	17.37%
Tier 1/ Tier 2 Actuarial accrued liability	$53,837,333	$51,970,582
Actuarial asset value	50,448,321	47,011,256
Tier 1/Tier 2 Unfunded actuarial accrued liability	3,389,012	4,959,326
Tier 1/ Tier 2 Funded status	94%	90%
Combined valuation payroll	$4,485,910	$5,808,820
Tier 1/Tier 2 UAL as a percentage of payroll	76%	85%
Tier 1/Tier 2 UAL rate	(0.83%)	(0.32%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	48	60
Tier 1/Tier 2 dormant members	92	98
Tier 1/Tier 2 retirees and beneficiaries	281	267

[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	4,485,910	5,808,820
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	0.00%	0.00%

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

Tier 1/Tier 2 Valuation Results

Assets

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

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

	December 31, 2013	December 31, 2012
1. Member reserves[1]	$8,198,755	$9,499,057
2. Employer reserves	22,195,584	21,332,524
3. Benefits in force reserve	20,053,982	16,179,675
4. Total market value of assets ***(1. + 2. + 3.)***	**$50,448,321**	**$47,011,256**

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	$47,011,256
2.	Regular employer contributions	458,066
3.	Benefit payments and expense	(3,104,440)
4.	Adjustments[2]	(458,637)
5.	Interest credited	6,542,077
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$50,448,321**

[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	$113,649	$107,869
Tier 1 General Service	190,066	242,969
Tier 2 Police & Fire	79,060	82,164
Tier 2 General Service	65,505	106,022
Total	**$448,280**	**$539,024**

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	$448,280	$448,280	$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	$3,864,587	$3,441,586
▪ Tier 1 General Service	8,253,316	10,193,904
▪ Tier 2 Police & Fire	1,605,400	1,479,818
▪ Tier 2 General Service	1,734,025	2,133,436
▪ **Total Active Members**	**$15,457,328**	**$17,248,744**
Dormant Members	6,053,691	7,456,853
Retired Members and Beneficiaries	32,326,314	27,264,985
Total Actuarial Accrued Liability	**$53,837,333**	**$51,970,582**

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	$53,837,333	$53,837,333	$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	$53,837,333	$51,970,582
2. Actuarial value of assets	50,448,321	47,011,256
3. Unfunded accrued liability *(1. – 2.)*	3,389,012	4,959,326
4. Funded percentage *(2. ÷ 1.)*	94%	90%
5. Combined valuation payroll	$4,485,910	$5,808,820
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	76%	85%

Reconciliation of UAL Bases

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

Amortization Base	UAL December 31, 2012	Payment	Interest	UAL December 31, 2013	Next Year's Payment
December 31, 2013	N/A	N/A	N/A	$3,389,012	$245,296
Total				**$3,389,012**	**$245,296**

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	$51,970,582
b. Normal cost at December 31, 2012	539,024
c. Benefit payments during 2013	(3,079,817)
d. Interest at 7.75% to December 31, 2013	3,950,152
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	53,379,941
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.)*	53,379,941
2. Actuarial accrued liability at December 31, 2013	53,837,333
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(457,392)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	47,011,256
b. Contributions for 2013[1]	458,066
c. Benefit payments and expenses during 2013	(3,104,440)
d. Interest at 7.75% to December 31, 2013	3,540,825
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	47,905,706
5. Actuarial value of assets at December 31, 2013	50,448,321
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	2,542,614
7. Total actuarial gain/(loss) *(3. + 6.)*	**$2,085,222**

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	**$4,959,326**
2. Expected increase	514,908
3. Liability (gain)/loss	457,392
4. Asset (gain)/loss	(2,542,614)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$3,389,012**

[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	$113,649	$613,684	18.52%	$107,869	$591,062	18.25%
Tier 1 General Service	190,066	878,403	21.64%	242,969	1,128,618	21.53%
Tier 2 Police & Fire	79,060	433,324	18.25%	82,164	464,656	17.68%
Tier 2 General Service	65,505	581,468	11.27%	106,022	918,090	11.55%
Total	**$448,280**	**$2,506,879**	**17.88%**	**$539,024**	**$3,102,426**	**17.37%**

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	$3,389,012	$4,959,326
2. Next year's Tier 1/Tier 2 UAL payment	245,296	358,955
3. Combined valuation payroll	4,485,910	5,808,820
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	5.47%	6.18%

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	17.88%	17.37%
b. Tier 1/Tier 2 UAL rate	5.47%	6.18%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	23.50%	23.68%

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	14.05%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	14.05%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	2.81%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	94%
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%)*	11.05%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	17.05%
7. July 1, 2015 total pension rate, before adjustment	23.50%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(6.45%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	5.47%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(0.98%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	17.05%
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	17.88%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	17.88%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	17.05%

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	17.88%	17.37%
b. Tier 1/Tier 2 UAL rate	(0.98%)	(0.45%)
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%)*	17.05%	17.05%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$878,403	$613,684	$1,492,087
Tier 2	581,468	433,324	1,014,792
Tier 1/Tier 2 valuation payroll	1,459,871	1,047,008	2,506,879
OPSRP valuation payroll	1,338,220	640,811	1,979,031
Combined valuation payroll	**$2,798,091**	**$1,687,819**	**$4,485,910**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	17	13	36	66	21	21	52	94
Police & Fire	10	8	15	33	10	8	11	29
Total	27	21	51	99	31	29	63	123
Active Members with previous service segments with the employer								
General Service	32	12	N/A	44	28	13	N/A	41
Police & Fire	9	11	N/A	20	9	8	N/A	17
Total	41	23	N/A	64	37	21	N/A	58
Dormant Members								
General Service	32	52	26	110	38	50	22	110
Police & Fire	4	4	6	14	7	3	4	14
Total	36	56	32	124	45	53	26	124
Retired Members and Beneficiaries								
General Service	209	20	3	232	200	17	1	218
Police & Fire	49	3	0	52	47	3	0	50
Total	258	23	3	284	247	20	1	268
Grand Total Number of Members	**362**	**123**	**86**	**571**	**360**	**123**	**90**	**573**

[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			2	3						**5**
45-49		1	1	2	3					**7**
50-54	1		4	2	2	1	1			**11**
55-59			2	2	3	5	2			**14**
60-64		1	2	1	2				1	**7**
65-69			1		1					**2**
70-74										
75+										
Total	**1**	**3**	**13**	**10**	**11**	**6**	**3**	**0**	**1**	**48**

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	4	105
40-44	4	1,500
45-49	8	879
50-54	15	804
55-59	20	741
60-64	26	469
65-69	12	734
70-74	2	201
75+	1	2,577
Total	92	699

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	5	562
55-59	13	1,118
60-64	43	1,293
65-69	64	1,010
70-74	52	1,039
75-79	47	611
80-84	24	533
85-89	17	538
90-94	16	289
95-99		
100+		
Total	281	879

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

Deschutes Public Library District/2828
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.

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September 2014
Deschutes Public Library District/2828

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 Preppernau

Scott D. Preppernau, FSA, EA
Consulting Actuary

Milliman

ACTUARIAL VALUATION REPORT DECEMBER 31, 2013

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

INDEPENDENT EMPLOYERS

Deschutes Public Library District -- #2828

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Deschutes Public Library 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 Deschutes Public Library 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 Deschutes Public Library District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	11.14%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	0.74%	0.74%	0.74%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**12.49%**	**8.68%**	**12.79%**
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	**13.02%**	**9.13%**	**13.24%**

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	11.88%	11.88%
Minimum July 1, 2017 Rate	8.88%	5.88%
Maximum July 1, 2017 Rate	14.88%	17.88%

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	$3,161,153	$3,612,587	$451,434	88%	$3,390,752	13%
12/31/2009	3,825,441	4,265,062	439,621	90%	3,541,986	12%
12/31/2010	4,331,306	4,802,931	471,625	90%	3,845,887	12%
12/31/2011	4,460,613	5,277,704	817,091	85%	3,653,084	22%
12/31/2012	5,162,441	6,430,787	1,268,346	80%	3,859,982	33%
12/31/2013	6,052,870	6,757,931	705,061	90%	3,987,553	18%

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.

Deschutes Public Library District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$705,061	$1,268,346
Allocated pooled OPSRP UAL	281,944	272,062
Side account	0	0
Net unfunded pension actuarial accrued liability	987,005	1,540,408
Combined valuation payroll	3,987,553	3,859,982
Net pension UAL as a percentage of payroll	25%	40%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$55,192	$80,984

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	$260,921	$276,887
Tier 1/Tier 2 valuation payroll	2,342,448	2,438,388
Tier 1/Tier 2 pension normal cost rate	11.14%	11.36%
Tier 1/ Tier 2 Actuarial accrued liability	$6,757,931	$6,430,787
Actuarial asset value	6,052,870	5,162,441
Tier 1/Tier 2 Unfunded actuarial accrued liability	705,061	1,268,346
Tier 1/ Tier 2 Funded status	90%	80%
Combined valuation payroll	$3,987,553	$3,859,982
Tier 1/Tier 2 UAL as a percentage of payroll	18%	33%
Tier 1/Tier 2 UAL rate	0.74%	0.52%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	48	51
Tier 1/Tier 2 dormant members	20	20
Tier 1/Tier 2 retirees and beneficiaries	18	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	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	3,987,553	3,859,982
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]	$788,369	$727,947
2. Employer reserves	4,342,891	3,578,137
3. Benefits in force reserve	921,609	856,357
4. Total market value of assets *(1. + 2. + 3.)*	**$6,052,870**	**$5,162,441**

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	$5,162,441
2.	Regular employer contributions	223,168
3.	Benefit payments and expense	(142,669)
4.	Adjustments[2]	(6,510)
5.	Interest credited	816,440
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$6,052,870**

[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	64,592	79,809
Tier 2 Police & Fire	0	0
Tier 2 General Service	196,329	197,078
Total	**$260,921**	**$276,887**

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	$260,921	$260,921	$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	1,109,400	1,188,807
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	3,713,449	3,417,009
▪ **Total Active Members**	**$4,822,849**	**$4,605,816**
Dormant Members	449,481	381,891
Retired Members and Beneficiaries	1,485,601	1,443,080
Total Actuarial Accrued Liability	**$6,757,931**	**$6,430,787**

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	$6,757,931	$6,757,931	$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	$6,757,931	$6,430,787
2. Actuarial value of assets	6,052,870	5,162,441
3. Unfunded accrued liability *(1. – 2.)*	705,061	1,268,346
4. Funded percentage *(2. ÷ 1.)*	90%	80%
5. Combined valuation payroll	$3,987,553	$3,859,982
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	18%	33%

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	$705,061	$51,032
Total				**$705,061**	**$51,032**

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	$6,430,787
b. Normal cost at December 31, 2012	276,887
c. Benefit payments during 2013	(141,537)
d. Interest at 7.75% to December 31, 2013	514,360
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	7,080,497
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.)*	7,080,497
2. Actuarial accrued liability at December 31, 2013	6,757,931
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	322,566
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	5,162,441
b. Contributions for 2013[1]	223,168
c. Benefit payments and expenses during 2013	(142,669)
d. Interest at 7.75% to December 31, 2013	403,209
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	5,646,148
5. Actuarial value of assets at December 31, 2013	6,052,870
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	406,721
7. Total actuarial gain/(loss) *(3. + 6.)*	**$729,287**

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	**$1,268,346**
2. Expected increase	166,002
3. Liability (gain)/loss	(322,566)
4. Asset (gain)/loss	(406,721)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$705,061**

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	64,592	504,071	12.81%	79,809	565,194	14.12%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	196,329	1,838,377	10.68%	197,078	1,873,194	10.52%
Total	**$260,921**	**$2,342,448**	**11.14%**	**$276,887**	**$2,438,388**	**11.36%**

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	$705,061	$1,268,346
2. Next year's Tier 1/Tier 2 UAL payment	51,032	91,803
3. Combined valuation payroll	3,987,553	3,859,982
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	1.28%	2.38%

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	11.14%	11.36%
b. Tier 1/Tier 2 UAL rate	1.28%	2.38%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	12.57%	13.87%

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	8.88%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	8.88%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.78%
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%)*	5.88%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	11.88%
7. July 1, 2015 total pension rate, before adjustment	12.57%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.69%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	1.28%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	0.59%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	11.88%
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	11.14%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	11.14%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	11.88%

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	11.14%	11.36%
b. Tier 1/Tier 2 UAL rate	0.59%	0.39%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate	11.88%	11.88%
(a. + b. + c., minimum of 5.47%)		

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$504,071	$0	$504,071
Tier 2	1,838,377	0	1,838,377
Tier 1/Tier 2 valuation payroll	2,342,448	0	2,342,448
OPSRP valuation payroll	1,645,105	0	1,645,105
Combined valuation payroll	**$3,987,553**	**$0**	**$3,987,553**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	13	35	49	97	14	37	44	95
Police & Fire	0	0	0	0	0	0	0	0
Total	13	35	49	97	14	37	44	95
Active Members with previous service segments with the employer								
General Service	3	7	N/A	10	2	2	N/A	4
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	3	7	N/A	10	2	2	N/A	4
Dormant Members								
General Service	4	16	3	23	5	15	4	24
Police & Fire	0	0	0	0	0	0	0	0
Total	4	16	3	23	5	15	4	24
Retired Members and Beneficiaries								
General Service	14	4	1	19	13	4	1	18
Police & Fire	0	0	0	0	0	0	0	0
Total	14	4	1	19	13	4	1	18
Grand Total Number of Members	**34**	**62**	**53**	**149**	**34**	**58**	**49**	**141**

[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		1	4	1						6
45-49			6	2						8
50-54			10	1		1				12
55-59			6	1		1				8
60-64			4	2	2					8
65-69				2						2
70-74			2			1				3
75+										
Total	0	1	33	9	2	3	0	0	0	48

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	282
40-44	3	395
45-49	1	791
50-54	2	497
55-59	3	195
60-64	6	279
65-69	2	194
70-74		
75+	1	110
Total	20	315

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64	5	701
65-69	7	519
70-74	5	657
75-79	1	320
80-84		
85-89		
90-94		
95-99		
100+		
Total	18	597

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

Deschutes Valley Water District/2527
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
Deschutes Valley Water District/2527

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
Deschutes Valley Water District/2527

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

Deschutes Valley Water District -- #2527

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Deschutes Valley 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 Deschutes Valley 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 Deschutes Valley Water District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	13.38%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	4.85%	4.85%	4.85%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**18.84%**	**12.79%**	**16.90%**
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	**19.37%**	**13.24%**	**17.35%**

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	18.23%	18.23%
Minimum July 1, 2017 Rate	14.58%	10.93%
Maximum July 1, 2017 Rate	21.88%	25.53%

Executive Summary

Accounting Information

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

Pension

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

For employers with July 1 to June 30 fiscal years, the requirements of GASB 68 will first be effective for the fiscal year ending June 30, 2015. The updated Tier 1/Tier 2 Schedule of Funding Progress for use in the Required Supplementary Information of an employer's financials is shown below. Other valuation-related components of employer GASB 27 reporting for such an employer's fiscal year ending June 30, 2014 were developed and presented in prior valuation reports.

Executive Summary

Accounting Information (continued)

Required Supplementary Information

Schedule of Funding Progress

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

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (b - a)	Funded Ratio (a ÷ b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a) ÷ c)
12/31/2008	$5,798,667	$8,368,502	$2,569,835	69%	$1,761,304	146%
12/31/2009	6,744,874	9,050,801	2,305,927	75%	1,719,655	134%
12/31/2010	7,454,286	9,509,643	2,055,357	78%	1,701,768	121%
12/31/2011	7,556,537	10,044,617	2,488,080	75%	1,753,293	142%
12/31/2012	8,072,355	9,748,713	1,676,358	83%	1,729,841	97%
12/31/2013	9,062,256	10,335,094	1,272,838	88%	1,771,241	72%

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.

Deschutes Valley Water District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$1,272,838	$1,676,358
Allocated pooled OPSRP UAL	125,238	121,924
Side account	0	0
Net unfunded pension actuarial accrued liability	1,398,076	1,798,282
Combined valuation payroll	1,771,241	1,729,841
Net pension UAL as a percentage of payroll	79%	104%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$24,516	$36,293

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	$182,148	$184,107
Tier 1/Tier 2 valuation payroll	1,361,039	1,335,280
Tier 1/Tier 2 pension normal cost rate	13.38%	13.79%
Tier 1/ Tier 2 Actuarial accrued liability	$10,335,094	$9,748,713
Actuarial asset value	9,062,256	8,072,355
Tier 1/Tier 2 Unfunded actuarial accrued liability	1,272,838	1,676,358
Tier 1/ Tier 2 Funded status	88%	83%
Combined valuation payroll	$1,771,241	$1,729,841
Tier 1/Tier 2 UAL as a percentage of payroll	72%	97%
Tier 1/Tier 2 UAL rate	4.85%	4.44%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	17	17
Tier 1/Tier 2 dormant members	2	2
Tier 1/Tier 2 retirees and beneficiaries	13	12

[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	1,771,241	1,729,841
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]	$1,992,216	$1,984,753
2. Employer reserves	3,992,689	3,391,678
3. Benefits in force reserve	3,077,351	2,695,924
4. Total market value of assets ***(1. + 2. + 3.)***	**$9,062,256**	**$8,072,355**

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	$8,072,355
2.	Regular employer contributions	236,463
3.	Benefit payments and expense	(476,387)
4.	Adjustments[2]	101,843
5.	Interest credited	1,127,982
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$9,062,256**

[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	141,095	144,246
Tier 2 Police & Fire	0	0
Tier 2 General Service	41,053	39,861
Total	**$182,148**	**$184,107**

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	$182,148	$182,148	$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	4,578,117	4,492,649
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	764,158	684,291
▪ **Total Active Members**	**$5,342,275**	**$5,176,940**
Dormant Members	32,237	28,769
Retired Members and Beneficiaries	4,960,582	4,543,004
Total Actuarial Accrued Liability	**$10,335,094**	**$9,748,713**

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	$10,335,094	$10,335,094	$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	$10,335,094	$9,748,713
2. Actuarial value of assets	9,062,256	8,072,355
3. Unfunded accrued liability *(1. – 2.)*	1,272,838	1,676,358
4. Funded percentage *(2. ÷ 1.)*	88%	83%
5. Combined valuation payroll	$1,771,241	$1,729,841
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	72%	97%

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	$1,272,838	$92,128
Total				**$1,272,838**	**$92,128**

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	$9,748,713
b. Normal cost at December 31, 2012	184,107
c. Benefit payments during 2013	(472,608)
d. Interest at 7.75% to December 31, 2013	751,480
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	10,211,692
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.)*	10,211,692
2. Actuarial accrued liability at December 31, 2013	10,335,094
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(123,402)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	8,072,355
b. Contributions for 2013[1]	236,463
c. Benefit payments and expenses during 2013	(476,387)
d. Interest at 7.75% to December 31, 2013	616,310
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	8,448,741
5. Actuarial value of assets at December 31, 2013	9,062,256
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	613,515
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$490,113**

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	**$1,676,358**
2. Expected increase	86,593
3. Liability (gain)/loss	123,402
4. Asset (gain)/loss	(613,515)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$1,272,838**

[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	141,095	929,442	15.18%	144,246	911,162	15.83%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	41,053	431,597	9.51%	39,861	424,118	9.40%
Total	**$182,148**	**$1,361,039**	**13.38%**	**$184,107**	**$1,335,280**	**13.79%**

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	$1,272,838	$1,676,358
2. Next year's Tier 1/Tier 2 UAL payment	92,128	121,335
3. Combined valuation payroll	1,771,241	1,729,841
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	5.20%	7.01%

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	Advisory July 1, 2015 Rates calculated as of December 31, 2012
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	13.38%	13.79%
b. Tier 1/Tier 2 UAL rate	5.20%	7.01%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	18.73%	20.93%

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	15.19%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	15.19%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.04%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.04%
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.)*	3.04%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	12.15%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	18.23%
7. July 1, 2015 total pension rate, before adjustment	18.73%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(0.50%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	5.20%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	4.70%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	18.23%
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	13.38%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	13.38%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	18.23%

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	13.38%	13.79%
b. Tier 1/Tier 2 UAL rate	4.70%	4.31%
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%)*	18.23%	18.23%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$929,442	$0	$929,442
Tier 2	431,597	0	431,597
Tier 1/Tier 2 valuation payroll	1,361,039	0	1,361,039
OPSRP valuation payroll	410,202	0	410,202
Combined valuation payroll	**$1,771,241**	**$0**	**$1,771,241**

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	6	6	23	11	6	6	23
Police & Fire	0	0	0	0	0	0	0	0
Total	11	6	6	23	11	6	6	23
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	13	0	0	13	12	0	0	12
Police & Fire	0	0	0	0	0	0	0	0
Total	13	0	0	13	12	0	0	12
Grand Total Number of Members	**25**	**7**	**6**	**38**	**24**	**7**	**6**	**37**

[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			2	1	1					**4**
45-49			2	1						**3**
50-54						1	1			**2**
55-59						2	1			**3**
60-64				1			1	1		**3**
65-69										
70-74										
75+										
Total	**0**	**0**	**4**	**5**	**1**	**3**	**3**	**1**	**0**	**17**

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	54
60-64	1	177
65-69		
70-74		
75+		
Total	2	116

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	1,918
60-64	3	3,552
65-69	6	2,296
70-74	2	2,600
75-79		
80-84	1	2,541
85-89		
90-94		
95-99		
100+		
Total	13	2,622

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

Douglas County Fire District #2/2729
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
Douglas County Fire District #2/2729

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
Douglas County Fire District #2/2729

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

Douglas County Fire District #2 -- #2729

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Douglas County Fire 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 Douglas County Fire 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 Douglas County Fire District #2

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	16.53%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	5.56%	5.56%	5.56%
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%**	**13.50%**	**17.61%**
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	**23.23%**	**13.95%**	**18.06%**

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 73%.

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	$18,740,759	$24,471,290	$5,730,531	77%	$5,030,988	114%
12/31/2009	21,244,955	27,112,422	5,867,467	78%	5,578,286	105%
12/31/2010	21,669,482	30,397,731	8,728,249	71%	5,660,706	154%
12/31/2011	19,613,988	31,008,691	11,394,703	63%	5,860,669	194%
12/31/2012	21,018,049	31,222,770	10,204,721	67%	5,735,311	178%
12/31/2013	23,382,518	32,170,990	8,788,472	73%	5,954,566	148%

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.

Douglas County Fire District #2

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$8,788,472	$10,204,721
Allocated pooled OPSRP UAL	421,024	404,241
Side account	0	0
Net unfunded pension actuarial accrued liability	9,209,496	10,608,962
Combined valuation payroll	5,954,566	5,735,311
Net pension UAL as a percentage of payroll	155%	185%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$82,418	$120,329

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	$450,506	$415,619
Tier 1/Tier 2 valuation payroll	2,724,892	2,565,696
Tier 1/Tier 2 pension normal cost rate	16.53%	16.20%
Tier 1/ Tier 2 Actuarial accrued liability	$32,170,990	$31,222,770
Actuarial asset value	23,382,518	21,018,049
Tier 1/Tier 2 Unfunded actuarial accrued liability	8,788,472	10,204,721
Tier 1/ Tier 2 Funded status	73%	67%
Combined valuation payroll	$5,954,566	$5,735,311
Tier 1/Tier 2 UAL as a percentage of payroll	148%	178%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	5.56%	6.99%
Tier 1/Tier 2 active members [1]	31	30
Tier 1/Tier 2 dormant members	2	4
Tier 1/Tier 2 retirees and beneficiaries	39	39

[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	5,954,566	5,735,311
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]	$2,561,473	$2,250,178
2. Employer reserves	7,410,762	5,956,815
3. Benefits in force reserve	13,410,283	12,811,056
4. Total market value of assets ***(1. + 2. + 3.)***	**$23,382,518**	**$21,018,049**

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	$21,018,049
2. Regular employer contributions	462,755
3. Benefit payments and expense	(2,075,968)
4. Adjustments[2]	854,660
5. Interest credited	3,123,023
6. Total transferred from side accounts	0
7. Market value of assets at end of year ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$23,382,518**

[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	$272,462	$241,201
Tier 1 General Service	14,514	12,247
Tier 2 Police & Fire	159,795	158,290
Tier 2 General Service	3,735	3,881
Total	**$450,506**	**$415,619**

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	$450,506	$450,506	$0

Tier 1/Tier 2 Valuation Results

Liabilities

Actuarial Accrued Liability

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

Summary of Actuarial Accrued Liability by Tier/Member Classification

	December 31, 2013	December 31, 2012
Active Members		
▪ Tier 1 Police & Fire	$8,044,658	$7,116,997
▪ Tier 1 General Service	258,388	214,992
▪ Tier 2 Police & Fire	2,189,870	1,962,093
▪ Tier 2 General Service	51,346	43,306
▪ **Total Active Members**	**$10,544,262**	**$9,337,388**
Dormant Members	9,823	296,983
Retired Members and Beneficiaries	21,616,905	21,588,399
Total Actuarial Accrued Liability	**$32,170,990**	**$31,222,770**

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	$32,170,990	$32,170,990	$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	$32,170,990	$31,222,770
2. Actuarial value of assets	23,382,518	21,018,049
3. Unfunded accrued liability *(1. – 2.)*	8,788,472	10,204,721
4. Funded percentage *(2. ÷ 1.)*	73%	67%
5. Combined valuation payroll	$5,954,566	$5,735,311
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	148%	178%

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	$8,788,472	$636,108
Total				**$8,788,472**	**$636,108**

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	$31,222,770
b. Normal cost at December 31, 2012	415,619
c. Benefit payments during 2013	(2,059,502)
d. Interest at 7.75% to December 31, 2013	2,372,169
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	31,951,056
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.)*	31,951,056
2. Actuarial accrued liability at December 31, 2013	32,170,990
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(219,934)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	21,018,049
b. Contributions for 2013[1]	462,755
c. Benefit payments and expenses during 2013	(2,075,968)
d. Interest at 7.75% to December 31, 2013	1,566,387
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	20,971,223
5. Actuarial value of assets at December 31, 2013	23,382,518
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	2,411,296
7. Total actuarial gain/(loss) *(3. + 6.)*	**$2,191,362**

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	**$10,204,721**
2. Expected increase	775,113
3. Liability (gain)/loss	219,934
4. Asset (gain)/loss	(2,411,296)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**$8,788,472**

[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	$272,462	$1,515,144	17.98%	$241,201	$1,406,955	17.14%
Tier 1 General Service	14,514	146,466	9.91%	12,247	91,455	13.39%
Tier 2 Police & Fire	159,795	1,024,893	15.59%	158,290	1,025,993	15.43%
Tier 2 General Service	3,735	38,389	9.73%	3,881	41,293	9.40%
Total	**$450,506**	**$2,724,892**	**16.53%**	**$415,619**	**$2,565,696**	**16.20%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$8,788,472	$10,204,721
2. Next year's Tier 1/Tier 2 UAL payment	636,108	738,616
3. Combined valuation payroll	5,954,566	5,735,311
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	10.68%	12.88%

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	16.53%	16.20%
b. Tier 1/Tier 2 UAL rate	10.68%	12.88%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	27.36%	29.21%

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	18.41%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	18.41%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	3.68%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.68%
c. Funded percentage	73%
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.)*	3.68%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	14.73%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	22.09%
7. July 1, 2015 total pension rate, before adjustment	27.36%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	(5.27%)
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	10.68%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	5.41%
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	16.53%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	16.53%
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	16.53%	16.20%
b. Tier 1/Tier 2 UAL rate	5.41%	6.86%
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%	23.19%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$146,466	$1,515,144	$1,661,610
Tier 2	38,389	1,024,893	1,063,282
Tier 1/Tier 2 valuation payroll	184,855	2,540,037	2,724,892
OPSRP valuation payroll	1,569,441	1,660,233	3,229,674
Combined valuation payroll	**$1,754,296**	**$4,200,270**	**$5,954,566**

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	35	38	2	1	39	42
Police & Fire	16	12	20	48	15	12	18	45
Total	18	13	55	86	17	13	57	87
Active Members with previous service segments with the employer								
General Service	1	2	N/A	3	1	1	N/A	2
Police & Fire	3	3	N/A	6	3	2	N/A	5
Total	4	5	N/A	9	4	3	N/A	7
Dormant Members								
General Service	0	1	2	3	0	1	2	3
Police & Fire	1	0	0	1	2	1	0	3
Total	1	1	2	4	2	2	2	6
Retired Members and Beneficiaries								
General Service	1	1	1	3	1	1	0	2
Police & Fire	37	0	0	37	36	1	0	37
Total	38	1	1	40	37	2	0	39
Grand Total Number of Members	**61**	**20**	**58**	**139**	**60**	**20**	**59**	**139**

[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							5
40-44			2	2	1					5
45-49			1	5	3	1				10
50-54				1	6	1				8
55-59		1		1						2
60-64				1						1
65-69										
70-74										
75+										
Total	0	1	8	10	10	2	0	0	0	31

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	243
50-54		
55-59		
60-64		
65-69	1	69
70-74		
75+		
Total	2	156

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54	4	3,266
55-59	10	5,347
60-64	7	4,686
65-69	7	2,813
70-74	7	2,500
75-79	4	2,298
80-84		
85-89		
90-94		
95-99		
100+		
Total	39	3,737

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

Douglas County/2003
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
Douglas County/2003

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

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

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

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

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

September 2014
Douglas County/2003

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

Douglas County -- #2003

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Douglas County to:

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

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

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Douglas County

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	16.48%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	8.86%	8.86%	8.86%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**25.95%**	**16.80%**	**20.91%**
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	**26.48%**	**17.25%**	**21.36%**

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	25.34%	25.34%
Minimum July 1, 2017 Rate	20.27%	15.20%
Maximum July 1, 2017 Rate	30.41%	35.48%

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	$201,654,842	$285,001,578	$83,346,736	71%	$31,295,331	266%
12/31/2009	226,064,086	295,167,317	69,103,231	77%	30,664,936	225%
12/31/2010	237,499,259	305,065,495	67,566,236	78%	31,655,167	213%
12/31/2011	228,167,624	308,521,151	80,353,527	74%	29,880,985	269%
12/31/2012	248,078,897	298,085,583	50,006,686	83%	30,384,722	165%
12/31/2013	270,412,262	306,548,858	36,136,596	88%	30,015,440	120%

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.

Douglas County

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$36,136,596	$50,006,686
Allocated pooled OPSRP UAL	2,122,274	2,141,599
Side account	0	0
Net unfunded pension actuarial accrued liability	38,258,870	52,148,285
Combined valuation payroll	30,015,440	30,384,722
Net pension UAL as a percentage of payroll	127%	172%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$415,446	$637,484

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	$2,789,326	$3,018,384
Tier 1/Tier 2 valuation payroll	16,920,750	18,018,581
Tier 1/Tier 2 pension normal cost rate	16.48%	16.75%
Tier 1/ Tier 2 Actuarial accrued liability	$306,548,858	$298,085,583
Actuarial asset value	270,412,262	248,078,897
Tier 1/Tier 2 Unfunded actuarial accrued liability	36,136,596	50,006,686
Tier 1/ Tier 2 Funded status	88%	83%
Combined valuation payroll	$30,015,440	$30,384,722
Tier 1/Tier 2 UAL as a percentage of payroll	120%	165%
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	8.86%	9.19%
Tier 1/Tier 2 active members [1]	328	357
Tier 1/Tier 2 dormant members	231	269
Tier 1/Tier 2 retirees and beneficiaries	1,105	1,054

[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	30,015,440	30,384,722
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]	$37,867,965	$40,356,041
2. Employer reserves	103,976,957	92,550,951
3. Benefits in force reserve	128,567,341	115,171,905
4. Total market value of assets ***(1. + 2. + 3.)***	**$270,412,262**	**$248,078,897**

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	$248,078,897
2.	Regular employer contributions	5,221,173
3.	Benefit payments and expense	(19,902,763)
4.	Adjustments[2]	2,081,395
5.	Interest credited	34,933,561
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$270,412,262**

[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	$391,011	$471,545
Tier 1 General Service	1,432,534	1,577,080
Tier 2 Police & Fire	360,125	369,640
Tier 2 General Service	605,656	600,119
Total	**$2,789,326**	**$3,018,384**

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	$2,789,326	$2,789,326	$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	$11,967,921	$13,847,840
▪ Tier 1 General Service	48,050,902	49,113,003
▪ Tier 2 Police & Fire	6,360,623	5,899,533
▪ Tier 2 General Service	12,397,270	11,294,626
▪ **Total Active Members**	**$78,776,716**	**$80,155,002**
Dormant Members	20,526,107	23,850,017
Retired Members and Beneficiaries	207,246,035	194,080,564
Total Actuarial Accrued Liability	**$306,548,858**	**$298,085,583**

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	$306,548,858	$306,548,858	$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	$306,548,858	$298,085,583
2. Actuarial value of assets	270,412,262	248,078,897
3. Unfunded accrued liability *(1. – 2.)*	36,136,596	50,006,686
4. Funded percentage *(2. ÷ 1.)*	88%	83%
5. Combined valuation payroll	$30,015,440	$30,384,722
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	120%	165%

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	$36,136,596	$2,615,561
Total				**$36,136,596**	**$2,615,561**

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	$298,085,583
b. Normal cost at December 31, 2012	3,018,384
c. Benefit payments during 2013	(19,744,902)
d. Interest at 7.75% to December 31, 2013	22,570,442
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	303,929,507
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.)*	303,929,507
2. Actuarial accrued liability at December 31, 2013	306,548,858
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(2,619,351)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	248,078,897
b. Contributions for 2013[1]	5,221,173
c. Benefit payments and expenses during 2013	(19,902,763)
d. Interest at 7.75% to December 31, 2013	18,657,203
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	252,054,509
5. Actuarial value of assets at December 31, 2013	270,412,262
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	18,357,753
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$15,738,402**

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	**$50,006,686**
2. Expected increase	1,868,312
3. Liability (gain)/loss	2,619,351
4. Asset (gain)/loss	(18,357,753)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$36,136,596**

[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	$391,011	$2,125,222	18.40%	$471,545	$2,527,049	18.66%
Tier 1 General Service	1,432,534	7,185,695	19.94%	1,577,080	7,823,628	20.16%
Tier 2 Police & Fire	360,125	2,201,499	16.36%	369,640	2,243,700	16.47%
Tier 2 General Service	605,656	5,408,334	11.20%	600,119	5,424,204	11.06%
Total	**$2,789,326**	**$16,920,750**	**16.48%**	**$3,018,384**	**$18,018,581**	**16.75%**

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	$36,136,596	$50,006,686
2. Next year's Tier 1/Tier 2 UAL payment	2,615,561	3,619,476
3. Combined valuation payroll	30,015,440	30,384,722
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	8.71%	11.91%

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	16.48%	16.75%
b. Tier 1/Tier 2 UAL rate	8.71%	11.91%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	25.34%	28.79%

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	21.62%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	21.62%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	4.32%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	4.32%
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.)*	4.32%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	17.30%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	25.94%
7. July 1, 2015 total pension rate, before adjustment	25.34%
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	8.71%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	8.71%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	25.34%
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	16.48%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	16.48%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	25.34%

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	16.48%	16.75%
b. Tier 1/Tier 2 UAL rate	8.71%	9.06%
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%)*	25.34%	25.94%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$7,185,695	$2,125,222	$9,310,917
Tier 2	5,408,334	2,201,499	7,609,833
Tier 1/Tier 2 valuation payroll	12,594,029	4,326,721	16,920,750
OPSRP valuation payroll	10,565,818	2,528,872	13,094,690
Combined valuation payroll	**$23,159,847**	**$6,855,593**	**$30,015,440**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	146	124	302	572	163	127	287	577
Police & Fire	28	30	46	104	35	32	38	105
Total	174	154	348	676	198	159	325	682
Active Members with previous service segments with the employer								
General Service	113	88	N/A	201	96	66	N/A	162
Police & Fire	16	19	N/A	35	11	17	N/A	28
Total	129	107	N/A	236	107	83	N/A	190
Dormant Members								
General Service	113	96	41	250	137	107	25	269
Police & Fire	13	9	4	26	14	11	3	28
Total	126	105	45	276	151	118	28	297
Retired Members and Beneficiaries								
General Service	897	49	8	954	851	52	3	906
Police & Fire	152	7	1	160	141	10	0	151
Total	1,049	56	9	1,114	992	62	3	1,057
Grand Total Number of Members	**1,478**	**422**	**402**	**2,302**	**1,448**	**422**	**356**	**2,226**

[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			5							**5**
35-39		2	16	4						**22**
40-44			13	18	2					**33**
45-49		2	20	13	14	4				**53**
50-54	1	2	15	6	16	6	1			**47**
55-59		2	19	16	21	14	9	3		**84**
60-64	1		20	13	17	11	3	1		**66**
65-69		1	7	2	2	2			1	**15**
70-74				1			1			**2**
75+				1						**1**
Total	**2**	**9**	**115**	**74**	**72**	**37**	**14**	**4**	**1**	**328**

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	683
35-39	10	285
40-44	18	1,024
45-49	24	1,396
50-54	43	776
55-59	62	898
60-64	41	1,177
65-69	17	1,273
70-74	6	641
75+	8	502
Total	231	965

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	2	908
45-49	4	1,226
50-54	14	1,088
55-59	74	2,125
60-64	206	1,683
65-69	257	1,606
70-74	193	1,292
75-79	156	1,411
80-84	94	1,051
85-89	55	793
90-94	38	761
95-99	11	220
100+	1	1,098
Total	1,105	1,432

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

Douglas Soil & Water Conservation District/2743
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
Douglas Soil & Water Conservation District/2743

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

Douglas Soil & Water Conservation District -- #2743

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Douglas 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 Douglas 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 Douglas Soil & Water Conservation District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	16.12%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(8.09%)	(8.09%)	(8.09%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**8.64%**	**0.00%**	**3.96%**
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	**9.17%**	**0.45%**	**4.41%**

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 158%.

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	8.03%	8.03%
Minimum July 1, 2017 Rate	5.03%	2.03%
Maximum July 1, 2017 Rate	11.03%	14.03%

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	$308,455	$313,693	$5,238	98%	$131,422	4%
12/31/2009	386,599	391,303	4,704	99%	210,437	2%
12/31/2010	453,715	393,860	(59,855)	115%	189,449	(32%)
12/31/2011	486,244	424,745	(61,499)	114%	242,761	(25%)
12/31/2012	577,655	353,317	(224,338)	163%	225,262	(100%)
12/31/2013	646,570	408,777	(237,793)	158%	208,958	(114%)

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.

Douglas Soil & Water Conservation District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($237,793)	($224,338)
Allocated pooled OPSRP UAL	14,775	15,877
Side account	0	0
Net unfunded pension actuarial accrued liability	(223,018)	(208,461)
Combined valuation payroll	208,958	225,262
Net pension UAL as a percentage of payroll	(107%)	(93%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,892	$4,726

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

Executive Summary

Principal Valuation Results (continued)

Tier 1/Tier 2

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
Normal cost	$8,837	$14,836
Tier 1/Tier 2 valuation payroll	54,820	74,564
Tier 1/Tier 2 pension normal cost rate	16.12%	19.90%
Tier 1/ Tier 2 Actuarial accrued liability	$408,777	$353,317
Actuarial asset value	646,570	577,655
Tier 1/Tier 2 Unfunded actuarial accrued liability	(237,793)	(224,338)
Tier 1/ Tier 2 Funded status	158%	163%
Combined valuation payroll	$208,958	$225,262
Tier 1/Tier 2 UAL as a percentage of payroll	(114%)	(100%)
Tier 1/Tier 2 UAL rate	(8.09%)	(8.49%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	2
Tier 1/Tier 2 dormant members	4	4
Tier 1/Tier 2 retirees and beneficiaries	1	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	208,958	225,262
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]	$186,109	$167,864
2. Employer reserves	417,784	409,791
3. Benefits in force reserve	42,678	0
4. Total market value of assets ***(1. + 2. + 3.)***	**$646,570**	**$577,655**

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	$577,655
2.	Regular employer contributions	8,345
3.	Benefit payments and expense	(6,607)
4.	Adjustments [2]	(17,376)
5.	Interest credited	84,553
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$646,570**

[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	8,837	8,394
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	6,442
Total	**$8,837**	**$14,836**

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	$8,837	$8,837	$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	236,186	209,288
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	12,994	64,739
▪ **Total Active Members**	**$249,180**	**$274,027**
Dormant Members	90,803	79,290
Retired Members and Beneficiaries	68,794	0
Total Actuarial Accrued Liability	**$408,777**	**$353,317**

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	$408,777	$408,777	$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	$408,777	$353,317
2. Actuarial value of assets	646,570	577,655
3. Unfunded accrued liability *(1. – 2.)*	(237,793)	(224,338)
4. Funded percentage *(2. ÷ 1.)*	158%	163%
5. Combined valuation payroll	$208,958	$225,262
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(114%)	(100%)

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	($237,793)	($17,211)
Total				**($237,793)**	**($17,211)**

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	$353,317
b. Normal cost at December 31, 2012	14,836
c. Benefit payments during 2013	(6,554)
d. Interest at 7.75% to December 31, 2013	28,278
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	389,877
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.)*	389,877
2. Actuarial accrued liability at December 31, 2013	408,777
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(18,900)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	577,655
b. Contributions for 2013[1]	8,345
c. Benefit payments and expenses during 2013	(6,607)
d. Interest at 7.75% to December 31, 2013	44,836
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	624,229
5. Actuarial value of assets at December 31, 2013	646,570
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	22,341
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$3,441**

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	**($224,338)**
2. Expected increase	(10,014)
3. Liability (gain)/loss	18,900
4. Asset (gain)/loss	(22,341)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($237,793)**

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	8,837	54,820	16.12%	8,394	53,495	15.69%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	6,442	21,069	30.58%
Total	**$8,837**	**$54,820**	**16.12%**	**$14,836**	**$74,564**	**19.90%**

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	($237,793)	($224,338)
2. Next year's Tier 1/Tier 2 UAL payment	(17,211)	(16,238)
3. Combined valuation payroll	208,958	225,262
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(8.24%)	(7.21%)

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	16.12%	19.90%
b. Tier 1/Tier 2 UAL rate	(8.24%)	(7.21%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	8.03%	12.82%

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	158%
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	8.03%
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	(8.24%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(8.24%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	8.03%
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	16.12%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	16.12%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	8.03%

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	16.12%	19.90%
b. Tier 1/Tier 2 UAL rate	(8.24%)	(8.62%)
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%)*	8.03%	11.41%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$54,820	$0	$54,820
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	54,820	0	54,820
OPSRP valuation payroll	154,138	0	154,138
Combined valuation payroll	**$208,958**	**$0**	**$208,958**

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	4	5	1	1	4	6
Police & Fire	0	0	0	0	0	0	0	0
Total	1	0	4	5	1	1	4	6
Active Members with previous service segments with the employer								
General Service	3	1	N/A	4	1	1	N/A	2
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	3	1	N/A	4	1	1	N/A	2
Dormant Members								
General Service	1	3	0	4	1	3	0	4
Police & Fire	0	0	0	0	0	0	0	0
Total	1	3	0	4	1	3	0	4
Retired Members and Beneficiaries								
General Service	0	1	0	1	0	0	0	0
Police & Fire	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0
Grand Total Number of Members	**5**	**5**	**4**	**14**	**3**	**5**	**4**	**12**

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

Data

Demographic Information (continued)

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

	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	3	545
50-54		
55-59		
60-64		
65-69	1	637
70-74		
75+		
Total	4	568

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59		
60-64		
65-69	1	549
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	1	549

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

East Fork Irrigation District/2529
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
East Fork Irrigation District/2529

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
East Fork Irrigation District/2529

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

East Fork Irrigation District -- #2529

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for East Fork 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 East Fork 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 East Fork Irrigation District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.77%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(6.48%)	(6.48%)	(6.48%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**9.90%**	**1.46%**	**5.57%**
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	**10.43%**	**1.91%**	**6.02%**

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

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

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 115%.

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	9.29%	9.29%
Minimum July 1, 2017 Rate	6.29%	3.29%
Maximum July 1, 2017 Rate	12.29%	15.29%

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	$1,025,313	$1,170,231	$144,918	88%	$230,228	63%
12/31/2009	1,189,617	1,242,347	52,730	96%	237,201	22%
12/31/2010	1,316,959	1,352,279	35,320	97%	243,351	15%
12/31/2011	1,369,662	1,464,619	94,957	94%	247,525	38%
12/31/2012	1,574,498	1,451,273	(123,225)	108%	253,094	(49%)
12/31/2013	1,797,235	1,558,241	(238,994)	115%	261,005	(92%)

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.

East Fork Irrigation District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($238,994)	($123,225)
Allocated pooled OPSRP UAL	18,455	17,839
Side account	0	0
Net unfunded pension actuarial accrued liability	(220,539)	(105,386)
Combined valuation payroll	261,005	253,094
Net pension UAL as a percentage of payroll	(85%)	(42%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$3,613	$5,310

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	$41,160	$39,415
Tier 1/Tier 2 valuation payroll	261,005	253,094
Tier 1/Tier 2 pension normal cost rate	15.77%	15.57%
Tier 1/ Tier 2 Actuarial accrued liability	$1,558,241	$1,451,273
Actuarial asset value	1,797,235	1,574,498
Tier 1/Tier 2 Unfunded actuarial accrued liability	(238,994)	(123,225)
Tier 1/ Tier 2 Funded status	115%	108%
Combined valuation payroll	$261,005	$253,094
Tier 1/Tier 2 UAL as a percentage of payroll	(92%)	(49%)
Tier 1/Tier 2 UAL rate	(6.48%)	(4.83%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members[1]	6	6
Tier 1/Tier 2 dormant members	2	2
Tier 1/Tier 2 retirees and beneficiaries	4	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	261,005	253,094
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]	$594,664	$542,637
2. Employer reserves	1,107,599	939,021
3. Benefits in force reserve	94,972	92,840
4. Total market value of assets ***(1. + 2. + 3.)***	**$1,797,235**	**$1,574,498**

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	$1,574,498
2.	Regular employer contributions	19,403
3.	Benefit payments and expense	(14,702)
4.	Adjustments[2]	7,691
5.	Interest credited	210,345
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$1,797,235**

[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	23,575	22,679
Tier 2 Police & Fire	0	0
Tier 2 General Service	17,585	16,736
Total	**$41,160**	**$39,415**

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	$41,160	$41,160	$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	841,656	778,497
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	340,393	304,978
▪ **Total Active Members**	**$1,182,049**	**$1,083,475**
Dormant Members	223,101	211,349
Retired Members and Beneficiaries	153,091	156,449
Total Actuarial Accrued Liability	**$1,558,241**	**$1,451,273**

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	$1,558,241	$1,558,241	$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	$1,558,241	$1,451,273
2. Actuarial value of assets	1,797,235	1,574,498
3. Unfunded accrued liability *(1. – 2.)*	(238,994)	(123,225)
4. Funded percentage *(2. ÷ 1.)*	115%	108%
5. Combined valuation payroll	$261,005	$253,094
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(92%)	(49%)

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	($238,994)	($17,298)
Total				**($238,994)**	**($17,298)**

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	$1,451,273
b. Normal cost at December 31, 2012	39,415
c. Benefit payments during 2013	(14,585)
d. Interest at 7.75% to December 31, 2013	114,963
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	1,591,066
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.)*	1,591,066
2. Actuarial accrued liability at December 31, 2013	1,558,241
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	32,825
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	1,574,498
b. Contributions for 2013[1]	19,403
c. Benefit payments and expenses during 2013	(14,702)
d. Interest at 7.75% to December 31, 2013	122,206
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	1,701,405
5. Actuarial value of assets at December 31, 2013	1,797,235
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	95,830
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$128,655**

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	**($123,225)**
2. Expected increase	12,886
3. Liability (gain)/loss	(32,825)
4. Asset (gain)/loss	(95,830)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($238,994)**

[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	23,575	116,621	20.22%	22,679	113,640	19.96%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	17,585	144,384	12.18%	16,736	139,454	12.00%
Total	**$41,160**	**$261,005**	**15.77%**	**$39,415**	**$253,094**	**15.57%**

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	($238,994)	($123,225)
2. Next year's Tier 1/Tier 2 UAL payment	(17,298)	(8,919)
3. Combined valuation payroll	261,005	253,094
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(6.63%)	(3.52%)

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	15.77%	15.57%
b. Tier 1/Tier 2 UAL rate	(6.63%)	(3.52%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.29%	12.18%

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	7.74%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	7.74%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.55%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	115%
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%)*	4.74%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	10.74%
7. July 1, 2015 total pension rate, before adjustment	9.29%
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(6.63%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(6.63%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.29%
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	15.77%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.77%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.29%

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	15.77%	15.57%
b. Tier 1/Tier 2 UAL rate	(6.63%)	(4.96%)
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%)*	9.29%	10.74%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$116,621	$0	$116,621
Tier 2	144,384	0	144,384
Tier 1/Tier 2 valuation payroll	261,005	0	261,005
OPSRP valuation payroll	0	0	0
Combined valuation payroll	**$261,005**	**$0**	**$261,005**

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	0	6	2	4	0	6
Police & Fire	0	0	0	0	0	0	0	0
Total	2	4	0	6	2	4	0	6
Active Members with previous service segments with the employer								
General Service	2	0	N/A	2	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	2	0	N/A	2	0	0	N/A	0
Dormant Members								
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
Retired Members and Beneficiaries								
General Service	4	0	0	4	4	0	0	4
Police & Fire	0	0	0	0	0	0	0	0
Total	4	0	0	4	4	0	0	4
Grand Total Number of Members	**10**	**4**	**0**	**14**	**8**	**4**	**0**	**12**

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

Data

Demographic Information (continued)

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

	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			**2**
60-64			1	1						**2**
65-69			1							**1**
70-74										
75+										
Total	**0**	**0**	**2**	**2**	**1**	**0**	**1**	**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		
40-44		
45-49		
50-54	1	1,991
55-59	1	321
60-64		
65-69		
70-74		
75+		
Total	2	1,156

Retired Members and Beneficiaries

Age	**Count**	**Average Monthly Benefit**
<45		
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75-79	2	137
80-84	2	832
85-89		
90-94		
95-99		
100+		
Total	4	485

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

Estacada Cemetery District/2618
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
Estacada Cemetery District/2618

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
Estacada Cemetery District/2618

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,

Scott Preppernau

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

Estacada Cemetery District -- #2618

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Estacada Cemetery 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 Estacada Cemetery 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 Estacada Cemetery District

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	18.84%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(13.37%)	(13.37%)	(13.37%)
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 432%.

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	$171,253	$55,968	($115,285)	306%	$42,940	(268%)
12/31/2009	205,540	51,404	(154,136)	400%	45,227	(341%)
12/31/2010	229,923	58,666	(171,257)	392%	48,044	(356%)
12/31/2011	235,178	60,314	(174,864)	390%	54,019	(324%)
12/31/2012	268,608	62,221	(206,387)	432%	51,551	(400%)
12/31/2013	309,375	71,677	(237,698)	432%	52,902	(449%)

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.

Estacada Cemetery District

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($237,698)	($206,387)
Allocated pooled OPSRP UAL	3,740	3,633
Side account	0	0
Net unfunded pension actuarial accrued liability	(233,958)	(202,754)
Combined valuation payroll	52,902	51,551
Net pension UAL as a percentage of payroll	(442%)	(393%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$732	$1,082

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	$1,044	$1,028
Tier 1/Tier 2 valuation payroll	7,806	7,808
Tier 1/Tier 2 pension normal cost rate	18.84%	18.61%
Tier 1/ Tier 2 Actuarial accrued liability	$71,677	$62,221
Actuarial asset value	309,375	268,608
Tier 1/Tier 2 Unfunded actuarial accrued liability	(237,698)	(206,387)
Tier 1/ Tier 2 Funded status	432%	432%
Combined valuation payroll	$52,902	$51,551
Tier 1/Tier 2 UAL as a percentage of payroll	(449%)	(400%)
Tier 1/Tier 2 UAL rate (includes Multnomah Fire District #10)	(13.37%)	(13.17%)
Tier 1/Tier 2 active members [1]	0	0
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	52,902	51,551
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]	$30,952	$26,661
2. Employer reserves	278,423	241,947
3. Benefits in force reserve	0	0
4. Total market value of assets *(1. + 2. + 3.)*	**$309,375**	**$268,608**

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	$268,608
2.	Regular employer contributions	(1,027)
3.	Benefit payments and expense	0
4.	Adjustments[2]	140
5.	Interest credited	41,654
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year *(1. + 2. + 3. + 4. + 5. + 6.)***	**$309,375**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	**December 31, 2012**
Tier 1 Police & Fire	$0	$0
Tier 1 General Service	1,044	1,028
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$1,044**	**$1,028**

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	$1,044	$1,044	$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	$0	$0
▪ Tier 1 General Service	16,768	14,595
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$16,768**	**$14,595**
Dormant Members	54,909	47,626
Retired Members and Beneficiaries	0	0
Total Actuarial Accrued Liability	**$71,677**	**$62,221**

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	$71,677	$71,677	$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	$71,677	$62,221
2. Actuarial value of assets	309,375	268,608
3. Unfunded accrued liability *(1. – 2.)*	(237,698)	(206,387)
4. Funded percentage *(2. ÷ 1.)*	432%	432%
5. Combined valuation payroll	$52,902	$51,551
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(449%)	(400%)

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	($237,698)	($17,205)
Total				**($237,698)**	**($17,205)**

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	$62,221
b. Normal cost at December 31, 2012	1,028
c. Benefit payments during 2013	0
d. Interest at 7.75% to December 31, 2013	4,902
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	68,151
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.)*	68,151
2. Actuarial accrued liability at December 31, 2013	71,677
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(3,526)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	268,608
b. Contributions for 2013[1]	(1,027)
c. Benefit payments and expenses during 2013	0
d. Interest at 7.75% to December 31, 2013	20,777
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	288,359
5. Actuarial value of assets at December 31, 2013	309,375
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	21,016
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$17,490**

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	**($206,387)**
2. Expected increase	(13,821)
3. Liability (gain)/loss	3,526
4. Asset (gain)/loss	(21,016)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**($237,698)**

1 *Includes rate relief from side accounts.*

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

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

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost Rate**	**Normal Cost**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost Rate**
Tier 1 Police & Fire	$0	$0	0.00%	$0	$0	0.00%
Tier 1 General Service	1,044	7,806	13.37%	1,028	7,808	13.17%
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	**$1,044**	**$7,806**	**13.37%**	**$1,028**	**$7,808**	**13.17%**

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	($237,698)	($206,387)
2. Next year's Tier 1/Tier 2 UAL payment	(17,205)	(14,938)
3. Combined valuation payroll	52,902	51,551
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(32.52%)	(28.98%)

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	13.37%	13.17%
b. Tier 1/Tier 2 UAL rate	(32.52%)	(28.98%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	(19.00%)	(15.68%)

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	432%
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	(19.00%)
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	19.00%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(32.52%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(13.52%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	0.00%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	5.47%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	13.37%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	18.84%
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	18.84%	18.61%
b. Tier 1/Tier 2 UAL rate	(13.52%)	(13.30%)
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	$7,806	$0	$7,806
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	7,806	0	7,806
OPSRP valuation payroll	45,096	0	45,096
Combined valuation payroll	**$52,902**	**$0**	**$52,902**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	0	0	1	1	0	0	1	1
Police & Fire	0	0	0	0	0	0	0	0
Total	0	0	1	1	0	0	1	1
Active Members with previous service segments with the employer								
General Service	1	0	N/A	1	0	0	N/A	0
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	1	0	N/A	1	0	0	N/A	0
Dormant Members								
General Service	0	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	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**	**1**	**1**	**3**	**0**	**1**	**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										
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	510
60-64		
65-69		
70-74		
75+		
Total	1	510

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

Eugene Water & Electric Board/2132
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
Eugene Water & Electric Board/2132

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
Eugene Water & Electric Board/2132

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

Eugene Water & Electric Board -- #2132

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Eugene Water & Electric Board to:

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

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

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Eugene Water & Electric Board

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	12.30%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	9.80%	9.80%	9.80%
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	(1.25%)	(1.25%)	(1.25%)
Net pension contribution rate	**21.46%**	**16.49%**	**20.60%**
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	**21.99%**	**16.94%**	**21.05%**

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 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	22.10%	22.10%
Minimum July 1, 2017 Rate	17.68%	13.26%
Maximum July 1, 2017 Rate	26.52%	30.94%

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	$188,893,782	$281,553,582	$92,659,800	67%	$35,686,738	260%
12/31/2009	208,718,948	290,442,448	81,723,500	72%	37,857,319	216%
12/31/2010	219,929,139	301,199,612	81,270,473	73%	40,283,981	202%
12/31/2011	212,836,317	306,418,228	93,581,912	69%	41,865,384	224%
12/31/2012	229,282,178	296,302,627	67,020,449	77%	42,796,406	157%
12/31/2013	252,345,343	301,660,662	49,315,319	84%	41,130,143	120%

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.

Eugene Water & Electric Board

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	$54,837,454	$72,170,199
Allocated pooled OPSRP UAL	2,908,151	3,016,408
Side account	5,522,135	5,149,750
Net unfunded pension actuarial accrued liability	52,223,470	70,036,857
Combined valuation payroll	41,130,143	42,796,406
Net pension UAL as a percentage of payroll	127%	164%
Calculated side account rate relief	(1.25%)	(1.07%)
Allocated pooled RHIA UAL	$569,285	$897,887

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	$2,440,757	$2,766,344
Tier 1/Tier 2 valuation payroll	19,846,847	22,210,381
Tier 1/Tier 2 pension normal cost rate	12.30%	12.46%
Tier 1/ Tier 2 Actuarial accrued liability	$301,660,662	$296,302,627
Actuarial asset value	246,823,208	224,132,428
Tier 1/Tier 2 Unfunded actuarial accrued liability	54,837,454	72,170,199
Tier 1/ Tier 2 Funded status	82%	76%
Combined valuation payroll	$41,130,143	$42,796,406
Tier 1/Tier 2 UAL as a percentage of payroll	133%	169%
Tier 1/Tier 2 UAL rate	9.80%	12.34%
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	219	245
Tier 1/Tier 2 dormant members	81	81
Tier 1/Tier 2 retirees and beneficiaries	603	583

[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**	**$5,149,750**	**$5,149,750**
2. Deposits made during 2013		N/A	
3. Administrative expenses		(1,000)	(1,000)
4. Amount transferred to employer reserves during 2013		(417,649)	(417,649)
5. Side account earnings during 2013		791,034	791,034
6. Side account as of December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***		**$5,522,135**	**$5,522,135**

Side Account Information

Side Account Balances

	December 31, 2013	December 31, 2012
Side account 1	$5,522,135	$5,149,750
Side account 2	0	0
Side account 3	0	0
Total	**$5,522,135**	**$5,149,750**

Development of Side Account Rate

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

	December 31, 2013	December 31, 2012
1. Total side account	$5,522,135	$5,149,750
2. Combined valuation payroll	41,130,143	42,796,406
3. Amortization factor	10.703	11.272
4. Total side account rate *(-1. ÷ 2. ÷ 3.)* [1]	(1.25%)	(1.07%)

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

Tier 1/Tier 2 Valuation Results

Assets

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

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

	December 31, 2013	December 31, 2012
1. Member reserves[1]	$19,306,466	$21,935,219
2. Employer reserves	81,576,054	68,480,946
3. Benefits in force reserve	145,940,688	133,716,263
4. Total market value of assets ***(1. + 2. + 3.)***	**$246,823,208**	**$224,132,428**

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	$224,132,428
2.	Regular employer contributions	7,906,195
3.	Benefit payments and expense	(22,592,231)
4.	Adjustments [2]	4,052,312
5.	Interest credited	32,906,855
6.	Total transferred from side accounts	417,649
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$246,823,208**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	$0	$0
Tier 1 General Service	1,221,542	1,490,397
Tier 2 Police & Fire	0	0
Tier 2 General Service	1,219,215	1,275,947
Total	**$2,440,757**	**$2,766,344**

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	$2,440,757	$2,440,757	$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	30,330,159	35,241,221
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	18,551,573	18,016,679
▪ **Total Active Members**	**$48,881,732**	**$53,257,900**
Dormant Members	17,527,668	17,714,360
Retired Members and Beneficiaries	235,251,262	225,330,367
Total Actuarial Accrued Liability	**$301,660,662**	**$296,302,627**

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	$301,660,662	$301,660,662	$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	$301,660,662	$296,302,627
2. Actuarial value of assets	246,823,208	224,132,428
3. Unfunded accrued liability *(1. – 2.)*	54,837,454	72,170,199
4. Funded percentage *(2. ÷ 1.)*	82%	76%
5. Combined valuation payroll	$41,130,143	$42,796,406
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	133%	169%

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	$54,837,454	$3,969,127
Total				**$54,837,454**	**$3,969,127**

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	$296,302,627
b. Normal cost at December 31, 2012	2,766,344
c. Benefit payments during 2013	(22,413,037)
d. Interest at 7.75% to December 31, 2013	22,309,340
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	298,965,274
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.)*	298,965,274
2. Actuarial accrued liability at December 31, 2013	301,660,662
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	(2,695,388)
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	224,132,428
b. Contributions for 2013[1]	8,323,844
c. Benefit payments and expenses during 2013	(22,592,231)
d. Interest at 7.75% to December 31, 2013	16,817,363
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	226,681,404
5. Actuarial value of assets at December 31, 2013	246,823,208
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	20,141,804
7. Total actuarial gain/(loss) ***(3. + 6.)***	**$17,446,416**

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	**$72,170,199**
2. Expected increase	113,671
3. Liability (gain)/loss	2,695,388
4. Asset (gain)/loss	(20,141,804)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 ***(1. + 2. + 3. + 4. + 5.)***	**$54,837,454**

[1] *Includes rate relief from side accounts.*

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

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

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost Rate**	**Normal Cost**	**Employer Tier 1/Tier 2 Valuation Payroll**	**Normal Cost Rate**
Tier 1 Police & Fire	$0	$0	0.00%	$0	$0	0.00%
Tier 1 General Service	1,221,542	8,233,369	14.84%	1,490,397	9,903,941	15.05%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	1,219,215	11,613,478	10.50%	1,275,947	12,306,440	10.37%
Total	**$2,440,757**	**$19,846,847**	**12.30%**	**$2,766,344**	**$22,210,381**	**12.46%**

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

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Development of Tier 1/Tier 2 UAL Rates

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

	December 31, 2013	December 31, 2012
1. Total Tier 1/Tier 2 UAL	$54,837,454	$72,170,199
2. Next year's Tier 1/Tier 2 UAL payment	3,969,127	5,223,668
3. Combined valuation payroll	41,130,143	42,796,406
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	9.65%	12.21%

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	12.30%	12.46%
b. Tier 1/Tier 2 UAL rate	9.65%	12.21%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	22.10%	24.80%

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	22.81%
2. Employer contribution rate attributable to side accounts	(1.01%)
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	23.82%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	4.76%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	4.76%
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.)*	4.76%
5. July 1, 2015 minimum employer contribution rate *(3. – 4.d. but not < 0%)*	19.06%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	28.58%
7. July 1, 2015 total pension rate, before adjustment	22.10%
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	9.65%
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	9.65%
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	22.10%
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	12.30%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	12.30%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	22.10%

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	12.30%	12.46%
b. Tier 1/Tier 2 UAL rate	9.65%	12.21%
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%)*	22.10%	24.80%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$8,233,369	$0	$8,233,369
Tier 2	11,613,478	0	11,613,478
Tier 1/Tier 2 valuation payroll	19,846,847	0	19,846,847
OPSRP valuation payroll	21,283,296	0	21,283,296
Combined valuation payroll	**$41,130,143**	**$0**	**$41,130,143**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	87	132	273	492	106	139	274	519
Police & Fire	0	0	0	0	0	0	0	0
Total	87	132	273	492	106	139	274	519
Active Members with previous service segments with the employer								
General Service	9	11	N/A	20	5	4	N/A	9
Police & Fire	0	0	N/A	0	0	0	N/A	0
Total	9	11	N/A	20	5	4	N/A	9
Dormant Members								
General Service	49	32	25	106	54	27	21	102
Police & Fire	0	0	0	0	0	0	0	0
Total	49	32	25	106	54	27	21	102
Retired Members and Beneficiaries								
General Service	577	24	5	606	542	39	5	586
Police & Fire	2	0	0	2	2	0	0	2
Total	579	24	5	608	544	39	5	588
Grand Total Number of Members	**724**	**199**	**303**	**1,226**	**709**	**209**	**300**	**1,218**

[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	2							**3**
35-39		2	13	2	1					**18**
40-44		1	20	4	1					**26**
45-49			19	11	4	1				**35**
50-54		2	16	12	13	12	1			**56**
55-59			20	13	8	8	3			**52**
60-64			7	5	4	3	2	1		**22**
65-69			5		1		1			**7**
70-74										
75+										
Total	**0**	**6**	**102**	**47**	**32**	**24**	**7**	**1**	**0**	**219**

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	3	1,467
40-44	6	1,449
45-49	13	1,855
50-54	20	2,556
55-59	24	2,199
60-64	14	1,707
65-69		
70-74	1	2,238
75+		
Total	81	2,065

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45	1	2,459
45-49	3	1,597
50-54	4	5,519
55-59	66	3,492
60-64	146	3,247
65-69	129	3,212
70-74	84	3,289
75-79	54	2,841
80-84	34	2,383
85-89	41	1,700
90-94	31	1,239
95-99	6	824
100+	4	772
Total	603	2,944

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

Evans Valley Fire District #6/2623
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
Evans Valley Fire District #6/2623

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

Evans Valley Fire District #6 -- #2623

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Evans Valley Fire District #6 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 Evans Valley Fire District #6.

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 Evans Valley Fire District #6

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	22.41%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(16.94%)	(16.94%)	(16.94%)
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 162%.

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	$391,338	$247,861	($143,477)	158%	$86,170	(167%)
12/31/2009	372,622	251,210	(121,412)	148%	47,547	(255%)
12/31/2010	412,333	270,024	(142,309)	153%	86,211	(165%)
12/31/2011	413,705	290,144	(123,561)	143%	90,266	(137%)
12/31/2012	463,790	306,995	(156,795)	151%	90,027	(174%)
12/31/2013	531,599	328,706	(202,893)	162%	84,680	(240%)

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.

Evans Valley Fire District #6

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($202,893)	($156,795)
Allocated pooled OPSRP UAL	5,987	6,345
Side account	0	0
Net unfunded pension actuarial accrued liability	(196,906)	(150,450)
Combined valuation payroll	84,680	90,027
Net pension UAL as a percentage of payroll	(233%)	(167%)
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$1,172	$1,889

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	$8,757	$8,501
Tier 1/Tier 2 valuation payroll	51,680	50,745
Tier 1/Tier 2 pension normal cost rate	22.41%	17.92%
Tier 1/ Tier 2 Actuarial accrued liability	$328,706	$306,995
Actuarial asset value	531,599	463,790
Tier 1/Tier 2 Unfunded actuarial accrued liability	(202,893)	(156,795)
Tier 1/ Tier 2 Funded status	162%	151%
Combined valuation payroll	$84,680	$90,027
Tier 1/Tier 2 UAL as a percentage of payroll	(240%)	(174%)
Tier 1/Tier 2 UAL rate	(16.94%)	(12.48%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	1	1
Tier 1/Tier 2 dormant members	1	1
Tier 1/Tier 2 retirees and beneficiaries	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	84,680	90,027
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]	$59,981	$51,601
2. Employer reserves	418,105	361,471
3. Benefits in force reserve	53,513	50,718
4. Total market value of assets ***(1. + 2. + 3.)***	**$531,599**	**$463,790**

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	$463,790
2.	Regular employer contributions	300
3.	Benefit payments and expense	(8,284)
4.	Adjustments [2]	4,205
5.	Interest credited	71,588
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$531,599**

[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	8,757	8,501
Tier 2 General Service	0	0
Total	**$8,757**	**$8,501**

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	$8,757	$8,757	$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	$21,403	$22,628
▪ Tier 1 General Service	0	0
▪ Tier 2 Police & Fire	184,367	167,477
▪ Tier 2 General Service	0	0
▪ **Total Active Members**	**$205,770**	**$190,105**
Dormant Members	36,675	31,423
Retired Members and Beneficiaries	86,261	85,467
Total Actuarial Accrued Liability	**$328,706**	**$306,995**

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	$328,706	$328,706	$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	$328,706	$306,995
2. Actuarial value of assets	531,599	463,790
3. Unfunded accrued liability *(1. – 2.)*	(202,893)	(156,795)
4. Funded percentage *(2. ÷ 1.)*	162%	151%
5. Combined valuation payroll	$84,680	$90,027
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(240%)	(174%)

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	($202,893)	($14,685)
Total				**($202,893)**	**($14,685)**

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	$306,995
b. Normal cost at December 31, 2012	8,501
c. Benefit payments during 2013	(8,218)
d. Interest at 7.75% to December 31, 2013	24,132
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	331,410
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.)*	331,410
2. Actuarial accrued liability at December 31, 2013	328,706
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	2,704
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	463,790
b. Contributions for 2013[1]	300
c. Benefit payments and expenses during 2013	(8,284)
d. Interest at 7.75% to December 31, 2013	35,634
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	491,440
5. Actuarial value of assets at December 31, 2013	531,599
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	40,159
7. Total actuarial gain/(loss) *(3. + 6.)*	**$42,863**

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	**($156,795)**
2. Expected increase	(3,235)
3. Liability (gain)/loss	(2,704)
4. Asset (gain)/loss	(40,159)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($202,893)**

[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	8,757	51,680	16.94%	8,501	50,745	16.75%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$8,757**	**$51,680**	**16.94%**	**$8,501**	**$50,745**	**16.75%**

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	($202,893)	($156,795)
2. Next year's Tier 1/Tier 2 UAL payment	(14,685)	(11,349)
3. Combined valuation payroll	84,680	90,027
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(17.34%)	(12.61%)

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

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

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

	July 1, 2015 Rates calculated as of December 31, 2013	**Advisory July 1, 2015 Rates calculated as of December 31, 2012**
1. Tier 1/Tier 2 pension contribution rates		
a. Employer Tier 1/Tier 2 pension normal cost rate	16.94%	16.75%
b. Tier 1/Tier 2 UAL rate	(17.34%)	(12.61%)
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	(0.25%)	4.27%

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	162%
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	(0.25%)
8. Net adjustment due to rate collar *(5. – 7., but not < 0, or 6. – 7., but not > 0)*	0.25%
9. July 1, 2015 Tier 1/Tier 2 UAL rate, before collar	(17.34%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(17.09%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	0.00%
12. Tier 1/Tier 2 retiree healthcare rate	0.53%
13. Net adjustment due to 6% minimum *(6% - 11. - 12., minimum 0%)*	5.47%
14. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, before minimum adjustment	16.94%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	22.41%
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	22.41%	17.92%
b. Tier 1/Tier 2 UAL rate	(17.09%)	(12.61%)
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	0	51,680	51,680
Tier 1/Tier 2 valuation payroll	0	51,680	51,680
OPSRP valuation payroll	0	33,000	33,000
Combined valuation payroll	**$0**	**$84,680**	**$84,680**

Employer Member Census

	December 31							
	2013				2012			
	Tier 1	Tier 2	OPSRP	Total	Tier 1	Tier 2	OPSRP	Total
Active Members [1]								
General Service	0	0	0	0	0	0	0	0
Police & Fire	0	1	1	2	0	1	1	2
Total	0	1	1	2	0	1	1	2
Active Members with previous service segments with the employer								
General Service	0	0	N/A	0	0	0	N/A	0
Police & Fire	1	0	N/A	1	1	0	N/A	1
Total	1	0	N/A	1	1	0	N/A	1
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	**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**
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	1	696
45-49		
50-54		
55-59		
60-64		
65-69		
70-74		
75+		
Total	1	696

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	455
60-64	1	51
65-69		
70-74		
75-79		
80-84		
85-89		
90-94		
95-99		
100+		
Total	2	253

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

Fern Ridge Community Library/2785
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
Fern Ridge Community Library/2785

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

Fern Ridge Community Library -- #2785

September 2014

CONTENTS

Executive Summary

Milliman has prepared this report for Fern Ridge Community Library 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 Fern Ridge Community Library.

Employer Contribution Rates

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

Employer Rates Effective July 1, 2015 for Fern Ridge Community Library

	Payroll		
		OPSRP	
	Tier 1/Tier 2	General Service	Police & Fire
Pension			
Normal cost rate	15.10%	7.33%	11.44%
Tier 1/Tier 2 UAL rate [1]	(6.08%)	(6.08%)	(6.08%)
OPSRP UAL rate	0.61%	0.61%	0.61%
Side account rate relief	0.00%	0.00%	0.00%
Net pension contribution rate	**9.63%**	**1.86%**	**5.97%**
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	**10.16%**	**2.31%**	**6.42%**

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

1 *Includes Multnomah Fire District #10 rate.*

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 149%.

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	9.02%	9.02%
Minimum July 1, 2017 Rate	6.02%	3.02%
Maximum July 1, 2017 Rate	12.02%	15.02%

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	$255,668	$212,322	($43,346)	120%	$129,190	(34%)
12/31/2009	309,834	243,714	(66,120)	127%	139,914	(47%)
12/31/2010	353,205	385,193	31,988	92%	181,132	18%
12/31/2011	368,747	416,146	47,399	89%	185,052	26%
12/31/2012	421,995	461,969	39,974	91%	175,148	23%
12/31/2013	477,134	321,246	(155,888)	149%	181,171	(86%)

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.

Fern Ridge Community Library

	Actuarial Valuation as of	
	December 31, 2013	**December 31, 2012**
T1/T2 UAL	($155,888)	$39,974
Allocated pooled OPSRP UAL	12,810	12,345
Side account	0	0
Net unfunded pension actuarial accrued liability	(143,078)	52,319
Combined valuation payroll	181,171	175,148
Net pension UAL as a percentage of payroll	(79%)	30%
Calculated side account rate relief	0.00%	0.00%
Allocated pooled RHIA UAL	$2,508	$3,675

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	$5,126	$4,967
Tier 1/Tier 2 valuation payroll	33,939	34,001
Tier 1/Tier 2 pension normal cost rate	15.10%	14.61%
Tier 1/ Tier 2 Actuarial accrued liability	$321,246	$461,969
Actuarial asset value	477,134	421,995
Tier 1/Tier 2 Unfunded actuarial accrued liability	(155,888)	39,974
Tier 1/ Tier 2 Funded status	149%	91%
Combined valuation payroll	$181,171	$175,148
Tier 1/Tier 2 UAL as a percentage of payroll	(86%)	23%
Tier 1/Tier 2 UAL rate	(6.08%)	(1.72%)
(includes Multnomah Fire District #10)		
Tier 1/Tier 2 active members [1]	2	3
Tier 1/Tier 2 dormant members	2	3
Tier 1/Tier 2 retirees and beneficiaries	3	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	181,171	175,148
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]	$77,068	$76,317
2. Employer reserves	363,177	320,147
3. Benefits in force reserve	36,889	25,531
4. Total market value of assets ***(1. + 2. + 3.)***	**$477,134**	**$421,995**

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	$421,995
2.	Regular employer contributions	2,102
3.	Benefit payments and expense	(5,711)
4.	Adjustments [2]	(4,664)
5.	Interest credited	63,412
6.	Total transferred from side accounts	0
7.	**Market value of assets at end of year** ***(1. + 2. + 3. + 4. + 5. + 6.)***	**$477,134**

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

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

Tier 1/Tier 2 Valuation Results

Liabilities

Normal Cost

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

Summary of Normal Cost by Tier/Member Classification

	December 31, 2013	December 31, 2012
Tier 1 Police & Fire	$0	$0
Tier 1 General Service	5,126	4,967
Tier 2 Police & Fire	0	0
Tier 2 General Service	0	0
Total	**$5,126**	**$4,967**

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	$5,126	$5,126	$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	160,610	327,786
▪ Tier 2 Police & Fire	0	0
▪ Tier 2 General Service	41,995	37,558
▪ **Total Active Members**	**$202,605**	**$365,344**
Dormant Members	59,177	53,603
Retired Members and Beneficiaries	59,464	43,022
Total Actuarial Accrued Liability	**$321,246**	**$461,969**

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	$321,246	$321,246	$0

Tier 1/Tier 2 Valuation Results

Unfunded Accrued Liability (UAL)

Summary of UAL

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

	December 31, 2013	December 31, 2012
1. Actuarial accrued liability	$321,246	$461,969
2. Actuarial value of assets	477,134	421,995
3. Unfunded accrued liability *(1. – 2.)*	(155,888)	39,974
4. Funded percentage *(2. ÷ 1.)*	149%	91%
5. Combined valuation payroll	$181,171	$175,148
6. Unfunded accrued liability as % of combined valuation payroll *(3. ÷ 5.)*	(86%)	23%

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	($155,888)	($11,283)
Total				**($155,888)**	**($11,283)**

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	$461,969
b. Normal cost at December 31, 2012	4,967
c. Benefit payments during 2013	(5,665)
d. Interest at 7.75% to December 31, 2013	35,968
e. Expected actuarial accrued liability before changes *(a. + b. + c. + d.)*	497,239
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.)*	497,239
2. Actuarial accrued liability at December 31, 2013	321,246
3. Gain/(loss) on actuarial accrued liability *(1.g. – 2.)*	175,993
4. Expected actuarial value of assets	
a. Actuarial value of assets at December 31, 2012	421,995
b. Contributions for 2013[1]	2,102
c. Benefit payments and expenses during 2013	(5,711)
d. Interest at 7.75% to December 31, 2013	32,565
e. Expected actuarial value of assets at December 31, 2013 *(a. + b. + c. + d.)*	450,951
5. Actuarial value of assets at December 31, 2013	477,134
6. Gain/(loss) on actuarial value of assets *(5. - 4.e.)*	26,183
7. Total actuarial gain/(loss) *(3. + 6.)*	**$202,176**

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	**$39,974**
2. Expected increase	6,314
3. Liability (gain)/loss	(175,993)
4. Asset (gain)/loss	(26,183)
5. Change due to changes in assumptions, methods, and plan provisions	0
6. UAL at December 31, 2013 *(1. + 2. + 3. + 4. + 5.)*	**($155,888)**

[1] *Includes rate relief from side accounts.*

Tier 1/Tier 2 Valuation Results

Contribution Rate Development

Normal Cost Rate

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

Development of Tier 1/Tier 2 Normal Cost Rate

	December 31, 2013			December 31, 2012		
	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate	Normal Cost	Employer Tier 1/Tier 2 Valuation Payroll	Normal Cost Rate
Tier 1 Police & Fire	$0	$0	0.00%	$0	$0	0.00%
Tier 1 General Service	5,126	33,939	15.10%	4,967	34,001	14.61%
Tier 2 Police & Fire	0	0	0.00%	0	0	0.00%
Tier 2 General Service	0	0	0.00%	0	0	0.00%
Total	**$5,126**	**$33,939**	**15.10%**	**$4,967**	**$34,001**	**14.61%**

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	($155,888)	$39,974
2. Next year's Tier 1/Tier 2 UAL payment	(11,283)	2,893
3. Combined valuation payroll	181,171	175,148
4. Tier 1/Tier 2 UAL rate *(2. ÷ 3.)*	(6.23%)	1.65%

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	15.10%	14.61%
b. Tier 1/Tier 2 UAL rate	(6.23%)	1.65%
c. Multnomah Fire District #10 rate	0.15%	0.13%
d. Total Tier 1/Tier 2 pension rate *(a. + b. + c.)*	9.02%	16.39%

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	9.89%
2. Employer contribution rate attributable to side accounts	0.00%
3. Current employer Tier 1/Tier 2 pension contribution rate *(1. – 2.)*	9.89%
4. Size of rate collar	
a. 20% of current employer contribution rate *(20% x 3.)*	1.98%
b. Preliminary size of rate collar *(maximum of 3% or a.)*	3.00%
c. Funded percentage	149%
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%)*	3.89%
6. July 1, 2015 maximum employer contribution rate *(3. + 4.d.)*	15.89%
7. July 1, 2015 total pension rate, before adjustment	9.02%
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	(6.23%)
10. July 1, 2015 Tier 1/Tier 2 UAL rate, after collar *(8. + 9.)*	(6.23%)
11. July 1, 2015 Tier 1/Tier 2 pension rate, after collar	9.02%
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	15.10%
15. July 1, 2015 Tier 1/Tier 2 pension normal cost rate, after minimum adjustment *(13. + 14.)*	15.10%
16. July 1, 2015 Tier 1/Tier 2 pension rate, after minimum adjustment *(11. + 13.)*	9.02%

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	15.10%	14.61%
b. Tier 1/Tier 2 UAL rate	(6.23%)	(1.85%)
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%)*	9.02%	12.89%

Data

Demographic Information

Employer Valuation Payroll

	General Service	Police & Fire	Total
Tier 1	$33,939	$0	$33,939
Tier 2	0	0	0
Tier 1/Tier 2 valuation payroll	33,939	0	33,939
OPSRP valuation payroll	147,232	0	147,232
Combined valuation payroll	**$181,171**	**$0**	**$181,171**

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	4	6	2	1	4	7
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	4	6	2	1	4	7
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	1	0	2	2	1	0	3
Police & Fire	0	0	0	0	0	0	0	0
Total	1	1	0	2	2	1	0	3
Retired Members and Beneficiaries								
General Service	3	0	0	3	1	0	0	1
Police & Fire	0	0	0	0	0	0	0	0
Total	3	0	0	3	1	0	0	1
Grand Total Number of Members	**6**	**2**	**4**	**12**	**5**	**2**	**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										
50-54										
55-59										
60-64										
65-69				1						**1**
70-74			1							**1**
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	1	806
40-44		
45-49		
50-54	1	306
55-59		
60-64		
65-69		
70-74		
75+		
Total	2	556

Retired Members and Beneficiaries

Age	Count	Average Monthly Benefit
<45		
45-49		
50-54		
55-59	1	1
60-64		
65-69	1	280
70-74		
75-79	1	181
80-84		
85-89		
90-94		
95-99		
100+		
Total	3	154

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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