

ACTUARIAL VALUATION REPORT DECEMBER 31, 2010

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

*TIER 1/TIER 2 AND OPSRP PENSION BENEFITS
RHIA/RHIPA RETIREE MEDICAL BENEFITS*

NOVEMBER 10, 2011

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Executive Summary

Mercer has prepared this report for the **Oregon Public Employees Retirement System** to:

- Present Mercer's actuarial estimates of the system-wide liabilities and expenses of the Oregon Public Employees Retirement System (PERS), including pension benefits provided through Tier 1/Tier 2 and the Oregon Public Service Retirement Plan (OPSRP), and retiree medical benefits provided through the Retiree Health Insurance Account (RHIA) and the Retiree Health Insurance Premium Account (RHIPA), as of December 31, 2010, for PERS to incorporate, as PERS deems appropriate, in its financial statements; and
- Provide advisory information on estimated system-wide average employer contribution rates and employer contribution rates for the School District rate pool and the State and Local Government Rate Pool (SLGRP) for the period beginning July 1, 2013.

This valuation does not cover the Individual Account Program (IAP). Except where otherwise explicitly noted, contribution rates in this valuation do not include contributions to the IAP. In addition, the valuation does not include an allowance for employer debt service payments on pension obligation bonds.

Employer Contribution Rates

This report presents the average employer contribution rates as of December 31, 2010. These rates are advisory only. The December 31, 2011, valuation will present the employer contribution rates that will be effective on July 1, 2013. The December 31, 2009, valuation presented the employer contribution rates that are in effect from July 1, 2011, through June 30, 2013.

Employer pension contribution rates consist of a normal cost rate and an amortization of the Unfunded Accrued Liability (UAL). Normal cost rates are calculated and charged separately to the Tier 1/Tier 2, OPSRP general service and OPSRP police and fire payrolls. UAL rates are calculated separately for Tier1/Tier 2 and OPSRP, but each UAL rate is charged across all payrolls. Rates for individual employers are adjusted if the employer maintains a side account or has a pre-SLGRP liability or surplus. The table below compares the average advisory employer contribution rates for each type of payroll calculated for this valuation compared to the rates in effect from July 1, 2011 through June 30, 2013.

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Pension Contribution Rates (Excludes IAP)

Payroll	Advisory July 1, 2013			Effective July 1, 2011		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
Normal Cost Rate	8.69%	6.08%	8.82%	8.57%	6.13%	8.84%
Tier 1/Tier 2 UAL Rate	11.16%	11.16%	11.16%	7.72%	7.72%	7.72%
OPSRP UAL Rate	0.10%	0.10%	0.10%	0.08%	0.08%	0.08%
Total Pension Rate	19.95%	17.34%	20.08%	16.37%	13.93%	16.64%
Average Adjustment ¹	(5.67%)	(5.67%)	(5.67%)	(5.53%)	(5.53%)	(5.53%)
Net Pension Rate	14.28%	11.67%	14.41%	10.84%	8.40%	11.11%

1. Adjustments shown are for side accounts and pre-SLGRP liabilities and are shown on system-wide average basis. For this purpose, adjustments are not assumed to be limited when an individual employer reaches a 0% contribution rate.

While PERS realized investment gains during 2010, the advisory UAL rates calculated in this valuation increased compared to the contribution rates calculated in the December 31, 2009, valuation and effective July 1, 2011. This is due to functioning of the "rate collar" contribution stabilization policy. The rate collar restricts the change in contribution rates from one biennium to the next to within a specified bound. When the calculated contribution rate is outside of the rate collar boundaries, a portion of the contribution increase or decrease is deferred to subsequent biennia. The contribution rates effective July 1, 2011, were calculated with the December 31, 2009, actuarial valuation, and were the first rates to reflect the large asset losses occurring during the financial crisis. A significant portion of the calculated contribution rate increase from the December 31, 2009, valuation was deferred due to the rate collar. These increases deferred by the rate collar are the primary cause of the increase in the Tier 1/Tier 2 UAL Rate shown in the table above.

The increase in the Tier 1/Tier 2 UAL Rate is compounded by rising Tier 1/Tier 2 normal cost rates as members under Money Match (with no normal cost) continue to retire and Tier 1/Tier 2 active members age. However, the 2010 asset gains on side account investments have slightly increased the size of the average side account rate relief compared to the current rates, offsetting some of the increase in the net pension rates.

The Tier 1/Tier 2 pension contribution rates differ for each rate pool and each independent employer. This report calculates the specific rates for each rate pool. Specific rates for independent employers are calculated in separate reports for each independent employer. Changes in pension contribution rates for each rate pool are confined to a rate collar depending on funded status. The table below shows the advisory employer pension contribution rates for each Tier 1/Tier 2 rate pool calculated for this valuation compared to the rates in effect as of July 1, 2011, and the average adjustment to that rate for side accounts and pre-SLGRP Liabilities. Please note that for the purposes of this exhibit as well as most other exhibits in this system-wide report, independent employers (including State Judiciary) are treated as a single rate pool.

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Tier 1/Tier 2 Pension Contribution Rates (Excludes IAP)

	Advisory July 1, 2013			Effective July 1, 2011		
	SLGRP	School Districts	Independent Employers	SLGRP	School Districts	Independent Employers
Normal Cost Rate	8.96%	7.72%	10.50%	8.89%	7.55%	10.35%
Tier 1/Tier 2 UAL Rate	9.40%	15.35%	6.78%	6.16%	11.26%	3.56%
Total Pension Rate	18.36%	23.07%	17.28%	15.05%	18.81%	13.91%
Average Adjustment ¹	(5.08%)	(8.02%)	(0.88%)	(4.98%)	(7.75%)	(0.87%)
Net Pension Rate	13.28%	15.05%	16.40%	10.07%	11.06%	13.04%

1. Adjustments shown are for side accounts and pre-SLGRP liabilities and are shown on system-wide average basis. For this purpose, adjustments are not assumed to be limited when an individual employer reaches a 0% contribution rate.

The Tier 1/Tier 2 contribution rates shown above are after reflection of the rate collar. As discussed above, due to the significant investment losses first recognized in contribution rates in the December 31, 2009, actuarial valuation, the rate collar deferred a significant portion of the rate increase calculated in that valuation. In the December 31, 2010, valuation, two of the three Tier 1/Tier 2 rate pools shown below have a calculated contribution rate, prior to application of the collar, which exceed the maximum rate allowed by the collar. The impact of this adjustment for each group is shown below. The amount of contribution rate increase that is deferred by the collar will be reflected in future rate-setting periods. In other words, if all assumptions are met, in addition to the increases illustrated in this valuation for advisory rates for the July 1, 2013 to June 30, 2015 biennium, we expect additional deferred increases to be reflected in the July 1, 2015 to June 30, 2017 biennium. For this exhibit, all independent employers (including State Judiciary) are treated as one employer. In practice, each independent employer has the rate collar applied separately.

Collar Impact on Tier 1/Tier 2 Pension Contribution Rates

	Advisory July 1, 2013		
	SLGRP	School Districts	Independent Employers
Total Pension Rate Before Collar	18.93%	23.07%	17.92%
Collar Adjustment	(0.57%)	0.00%	(0.64%)
Total Pension Rate After Collar	18.36%	23.07%	17.28%
Average Adjustment	(5.08%)	(8.02%)	(0.88%)
Net Pension Rate	13.28%	15.05%	16.40%

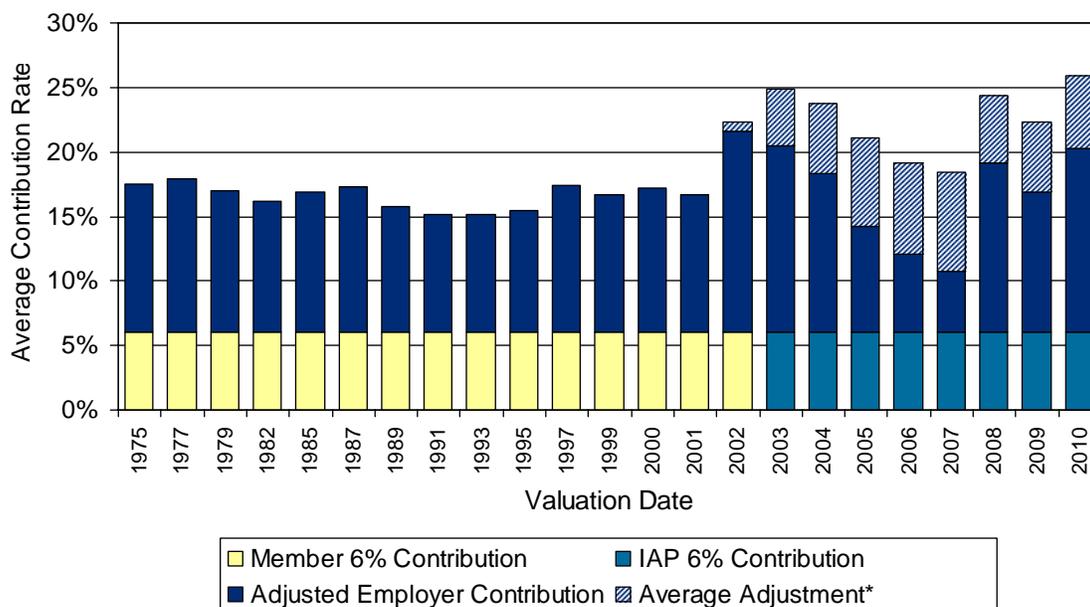
In addition to the pension contribution rates, employers also contribute to the Retirement Health Insurance Account (RHIA) and State Agencies and State Judiciary contribute to the Retiree Health Insurance Premium Account (RHIPA). Only Tier 1 and Tier 2 members are eligible for these benefits, so the normal cost rates are only charged to Tier 1/Tier 2 payroll, but the UAL rates are charged to all payrolls. For each type of payroll used in this valuation the table below compares the advisory employer contribution rates to the rates in effect from July 1, 2011 through June 30, 2013. The increase in UAL contribution rates is chiefly due to the increased levels of actual and assumed participation. The new participation assumptions were adopted by the PERS Board with the 2010 Experience Study.

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Retiree Healthcare Contribution Rates

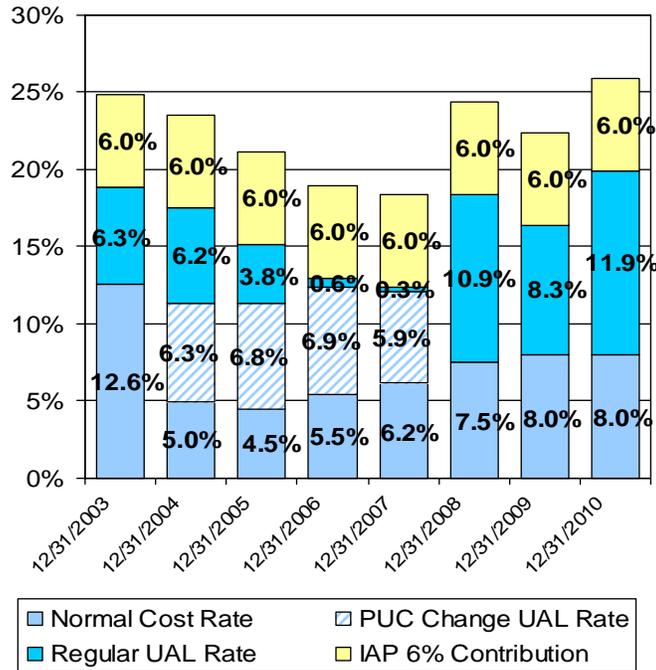
Payroll	Advisory July 1, 2013			Effective July 1, 2011		
	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire	Tier 1/Tier 2	OPSRP General Service	OPSRP Police & Fire
RHIA normal cost rate	0.10%	0.00%	0.00%	0.09%	0.00%	0.00%
RHIA UAL Rate	0.56%	0.56%	0.56%	0.50%	0.50%	0.50%
Total RHIA rate	0.66%	0.56%	0.56%	0.59%	0.50%	0.50%
RHIPA Normal Cost Rate	0.07%	0.00%	0.00%	0.05%	0.00%	0.00%
RHIPA UAL Rate	0.17%	0.17%	0.17%	0.11%	0.11%	0.11%
Total RHIPA rate	0.24%	0.17%	0.17%	0.16%	0.11%	0.11%

Combined pension and retiree healthcare employer contribution rates increased from the prior valuation, due to deferred contribution rate increases from the prior valuation. When the IAP is included, combined rates are now above the level of their historical high point, as shown in the graph below.



As shown below, the average normal cost rate declined dramatically after the 2003 valuation, primarily due to the change in the actuarial cost allocation method. The new method allocates a 0% normal cost rate to benefits projected to be paid from the Money Match formula, since no new member contributions are allowed. As additional long-service members retire under the Money Match formula, we expect the normal cost rate to increase over time, as it has done over the past several years.

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The Unfunded Accrued Liability (UAL) rate attributable to the change in actuarial cost allocation method was removed from the valuation calculations first effective with the December 31, 2008 actuarial valuation. The three-year amortization base first established on December 31, 2005 with the change of the cost method at that time was fully amortized on July 2011. The UAL attributable to gains and losses other than the cost method change has increased since the last valuation due to the deferred contribution rate increases from the previous valuation.

For an individual employer, the rates shown above are adjusted for side accounts. Side accounts are the result of employer supplemental deposits, typically financed through a pension obligation bond. When a supplemental deposit is made, a side account is established (after any transition liabilities for joining the SLGRP have been paid) and used to offset the otherwise required contribution. As of December 31, 2010, the system has approximately \$5.6 billion in side accounts, an increase of about \$0.1 billion in the last year. Side accounts now reduce the average employer contribution rate by about 5.25% of payroll, but there is wide variation between employers.

For individual employers in the SLGRP, the rates shown above are also adjusted for amortization payments on pre-SLGRP liabilities. The average adjustment to individual employer rates due to side accounts and pre-SLGRP liabilities is shown on a combined basis in the table on page 2.

The minimum and maximum rates that can be effective July 1, 2013 for each rate pool (prior to adjustments) are shown in the table below. The limits are calculated and applied on an individual employer basis for independent employers, but for purposes of the table below, all independent employers (including State Judiciary) are treated as a single rate pool. The contribution rates for individual employers are adjusted from the rates of the pool to reflect side accounts and pre-SLGRP liabilities. These adjustments are not limited by the rate collar.

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The size of the rate collar depends on the funded status of a rate pool or employer. When funded status is less than 70 percent or above 130 percent, the size of the rate collar is twice the size of the “single collar” that applies when funded status is between 80 percent and 120 percent. The rate collar provides a graded schedule between the single and double rate collars if the funded status, excluding side accounts, is between 70% and 80% or 120% and 130%.

Limits on Future Pension Contribution Rates

	Effective July 1, 2013		
	Tier 1/Tier 2		
	SLGRP	School Districts	Independent Employers
Between 80% and 120% Funded			
Minimum Rate	12.04%	15.05%	10.91%
Maximum Rate	18.06%	22.57%	16.91%
Less than 70% or Greater than 130% Funded			
Minimum Rate	9.03%	11.29%	7.91%
Maximum Rate	21.07%	26.33%	19.91%

For Rate Pools funded between 70% and 80% or between 120% and 130% the limits vary linearly between the rates shown above.

Funded Status

The table below shows the funded status of the various pension rate pools both on the basis used to calculate the contribution rate for each rate pool and after adjustment for side accounts (assuming side accounts offset Tier 1/Tier 2 liabilities). For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	SLGRP	School Districts	Independent Employers	OPSRP	Pension System Totals ¹
December 31, 2010					
Actuarial accrued liability	\$ 30,285.0	\$ 23,303.3	\$ 4,913.1	\$ 767.6	\$ 59,329.5
Actuarial value of assets	\$ 23,879.0	\$ 17,473.3	\$ 4,100.9	\$ 659.0	\$ 46,004.4
Funded percentage	78.8%	75.0%	83.5%	85.8%	77.5%
Side accounts	\$ 2,620.5	\$ 2,870.1	\$ 88.5	\$ -	\$ 5,579.2
Funded percentage reflecting side accounts	87.5%	87.3%	85.3%	85.8%	86.9%
December 31, 2009					
Actuarial accrued liability	\$ 29,029.1	\$ 22,517.6	\$ 4,665.9	\$ 535.5	\$ 56,810.6
Actuarial value of assets	\$ 22,476.0	\$ 16,577.4	\$ 3,839.7	\$ 445.4	\$ 43,238.8
Funded percentage	77.4%	73.6%	82.3%	83.2%	76.1%
Side accounts	\$ 2,592.8	\$ 2,810.6	\$ 86.9	\$ -	\$ 5,490.4
Funded percentage reflecting side accounts	86.4%	86.1%	84.2%	83.2%	85.8%

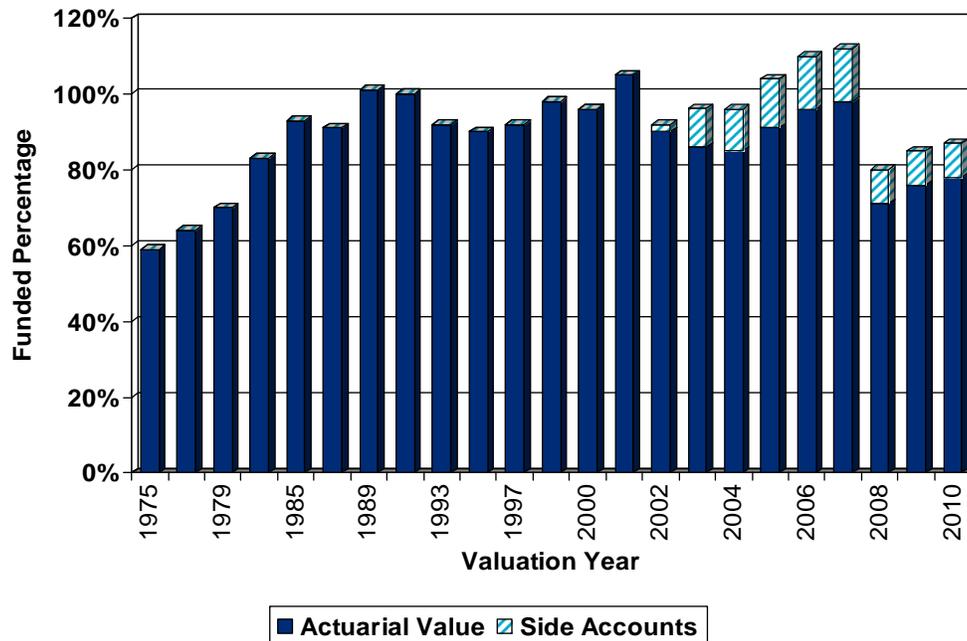
Amounts in millions

¹ Includes Multnomah Fire District #10

As shown in the graph below, the funded status of the system generally improved until the market decline of 2000-2002. The restatement of the December 31, 2001 actuarial valuation to reflect the impact of the 2003 reforms mitigates the impact on the reported funded status of the market downturn. Funded status was generally improving for several years due to better than expected

Executive Summary

investment returns until 2008. Funded status decreased significantly during 2008 due to investment losses.



The retiree medical benefits are funded using a 401(h) account within the pension trust. The table below shows the funded status of the retiree medical programs.

	December 31, 2010			December 31, 2009		
	RHIA	RHIPA	Total	RHIA	RHIPA	Total
Actuarial accrued liability	\$547.1	\$33.9	\$581.1	\$511.2	\$24.5	\$535.7
Actuarial value of assets	\$232.3	\$5.7	\$238.0	\$214.1	\$6.4	\$220.5
Funded Percentage	42.5%	16.8%	41.0%	41.9%	25.9%	41.2%

Amounts in millions

Asset Changes

Since December 31, 2009, contributions (including supplemental deposits) for pension benefits have increased assets by approximately 0.9% while benefit payments decreased assets by about 6.3%. On the whole, assets increased by 7% due to positive investment returns of approximately 12.4%.

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All Reserves	Amount	Percentage of 12/31/2009 Market Value
Market value, December 31, 2009	\$ 49,618.7	
Contributions	449.5	0.9%
Investment Income	6,038.9	12.2%
Benefit Payments	(3,103.6)	(6.3%)
Market value, December 31, 2010	\$ 53,003.6	106.8%

Amounts in millions

The Tier 1 Rate Guarantee Reserve that is used to pay for the 8% interest crediting rate guarantee on active Tier 1 member accounts when actual investment earnings are below 8% has improved from a negative \$0.4 billion as of December 31, 2009 to negative \$0.2 billion as of December 31, 2010. Tier 1 member accounts that are protected by the Rate Guarantee Reserve decreased from \$7.7 billion on December 31, 2009, to \$7.6 billion on December 31, 2010.

The value of assets used to determine employer contribution rates has historically excluded any assets in the Tier 1 Rate Guarantee Reserve (RGR). This has been the case whether the RGR is positive (a surplus reserve) or negative (a deficit reserve). Due to 2008 investment losses the RGR remains in a deficit situation as of December 31, 2010. Mathematically, excluding the reserve when it is in deficit status has the effect of increasing the valuation assets. As part of the mandated biennial review of actuarial assumptions and methods, the Board revised the treatment of the RGR effective with this valuation so that the RGR would not be excluded from the valuation assets when it is in deficit status. It is our understanding that if a RGR deficit persists for five years, employers may be required to restore the RGR. A more detailed explanation of this issue can be found in the 2010 Experience Study report.

Market values are reported to Mercer by PERS. It is our understanding that select real estate and private equity investments are reported on a three-month lag basis. This valuation report does not attempt to quantify any such effects.

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Liability Changes

Since December 31, 2009, the system-wide actuarial accrued liability has increased primarily due to interest on the liability as current active members get closer to retirement. The normal cost, or the value of benefits attributable to that year of service, was about one-fifth of the value of benefits paid out during the year. The remaining 0.8% increase in the actuarial accrued liability was attributable to demographic experience and assumption changes adopted by the Board as part of the 2010 Experience Study.

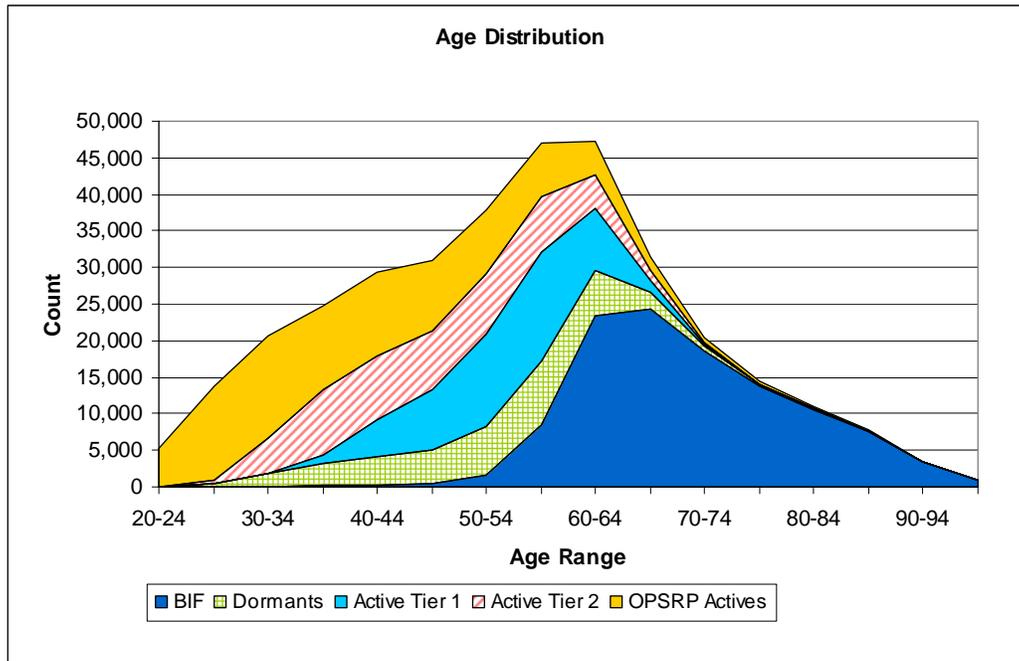
	Amount	Percentage of 12/31/2009 AAL
Actuarial Accrued Liability, December 31, 2009	\$ 57,346.3	
Normal Cost	684.0	1.2%
Benefit Payments	(3,103.6)	(5.4%)
Interest	4,518.3	7.9%
Other	465.6	0.8%
Actuarial Accrued Liability, December 31, 2010	\$ 59,910.6	104.5%

Amounts in millions

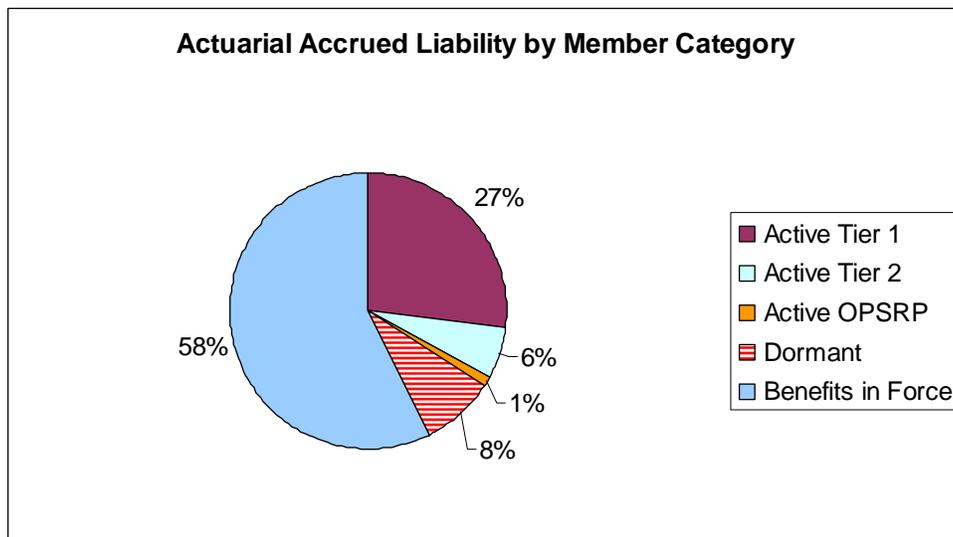
The Oregon Public Employees Retirement System is a very mature system. There are currently 1.27 active members in the system for every inactive member. By comparison, the average ratio in NASRA's 2009 Public Fund Survey is 1.92. Since contributions to the system are based on active payroll, a lower ratio means there are fewer actives to support any gains or losses on the benefits of retirees.

The ratio of active members to retired members is likely to decline further as a significant portion of the active members are currently eligible to retire. The graph below shows the distribution of members in the system by age and membership status.

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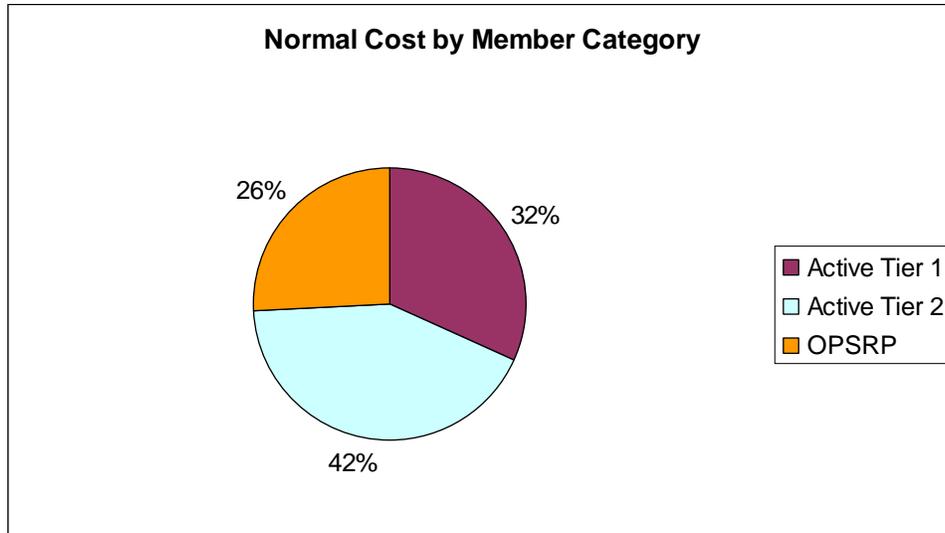
The following chart illustrates the distribution of the system’s accrued liability by member age and status. While the majority of active liability is attributable to Tier 1 members, 66% of the system’s total accrued liability is due to members who are no longer actively working in covered employment. Only 7% of the liability is attributable to active Tier 2 and OPSRP members. Of the accrued liability that is attributable to actives, a large portion is located at or near prime retirement ages.



As shown below, Tier 2 members account for nearly half of the system’s normal cost compared to about 6% of the system’s accrued liability. Tier 2 members are likely to retire under the Full Formula calculation rather than the Money Match calculation. Because no additional Member contributions are permitted, the Money Match formula is essentially frozen. Consequently, many

Executive Summary

Tier 1 Members who are expected to retire under the Money Match formula have no normal cost.



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 after the summary. Combined valuation payroll includes Tier 1/Tier 2 payroll and OPSRP payroll.

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	Actuarial Valuation as of		Percent Change	
	December 31, 2010	December 31, 2009		
Tier 1/Tier 2 Pension				
Actuarial accrued liability	\$ 58,561.9	\$ 56,275.0	4%	
Actuarial value of assets	\$ 45,345.4	\$ 42,793.4	6%	
Unfunded actuarial accrued liability	\$ 13,216.5	\$ 13,481.6	(2%)	
Funded status	77%	76%		
Combined valuation payroll	\$ 8,750.1	\$ 8,512.2	3%	
UAL as a percentage of payroll	151%	158%		
Normal cost	\$ 515.1	\$ 524.8	(2%)	
Tier 1/Tier 2 valuation payroll	\$ 5,930.3	\$ 6,123.4	(3%)	
Normal cost rate	8.69%	8.57%		
OPSRP Pension				
Actuarial accrued liability	\$ 767.6	\$ 535.5	43%	
Actuarial value of assets	\$ 659.0	\$ 445.4	48%	
Unfunded actuarial accrued liability	\$ 108.6	\$ 90.1	21%	
Funded status	86%	83%		
Combined valuation payroll	\$ 8,750.1	\$ 8,512.2	3%	
UAL as a percentage of payroll	1%	1%		
Normal cost	\$ 179.2	\$ 152.9	17%	
OPSRP valuation payroll	\$ 2,819.8	\$ 2,388.8	18%	
Normal cost rate	6.35%	6.40%		
Combined Pension				
Actuarial accrued liability	\$ 59,329.5	\$ 56,810.6	4%	
Actuarial value of assets	\$ 46,004.4	\$ 43,238.8	6%	
Unfunded actuarial accrued liability	\$ 13,325.1	\$ 13,571.7	(2%)	
Funded status	78%	76%		
Combined valuation payroll	\$ 8,750.1	\$ 8,512.2	3%	
UAL as a percentage of payroll	152%	159%		
Normal cost	\$ 694.3	\$ 677.7	2%	
Combined valuation payroll	\$ 8,750.1	\$ 8,512.2	3%	
Normal cost rate	7.93%	7.96%		

Amounts in millions

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	Actuarial Valuation as of		Percent Change	
	December 31, 2010	December 31, 2009		
RHIA				
Actuarial accrued liability	\$ 547.1	\$ 511.2	7%	
Actuarial asset value	\$ 232.3	\$ 214.1	8%	
Unfunded actuarial accrued liability	\$ 314.8	\$ 297.1	6%	
Funded status	42%	42%		
Combined valuation payroll	\$ 8,750.1	\$ 8,512.2	3%	
UAL as a percentage of payroll	4%	3%		
Normal cost	\$ 6.0	\$ 5.5	9%	
Tier 1/Tier 2 valuation payroll	\$ 5,930.3	\$ 6,123.4	(3%)	
Normal cost rate	0.10%	0.09%		
RHIPA				
Actuarial accrued liability	\$ 33.9	\$ 24.5	38%	
Actuarial asset value	\$ 5.7	\$ 6.4	(10%)	
Unfunded actuarial accrued liability	\$ 28.2	\$ 18.2	55%	
Funded status	17%	26%		
Combined valuation payroll	\$ 2,379.7	\$ 2,371.8	0%	
UAL as a percentage of payroll	1%	1%		
Normal cost	\$ 1.2	\$ 0.8	44%	
Tier 1/Tier 2 valuation payroll	\$ 1,603.3	\$ 1,705.1	(6%)	
Normal cost rate	0.07%	0.05%		

Amounts in millions

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Data Summary

A brief summary of the data underlying the current and prior valuation follows. Additional detail can be found in the data section of this report. State Judiciary is included in the Tier 1 counts.

	December 31				
	2010				2009
	Tier 1	Tier 2	OPSRP	Total	Total
Active Members					
Count	52,786	52,389	88,394	193,569	178,606
Average age	53.6	47.1	41.1	46.1	46.2
Average total service	20.7	10.2	3.6	10.1	10.3
Average valuation payroll	\$ 61,392	\$ 51,340	\$ 31,900	\$ 45,204	\$ 47,659
Dormant Members¹					
Count	21,266	15,630	2,457	39,353	39,317
Average age	56.0	49.4	45.9	52.7	52.1
Average monthly deferred benefit	\$ 2,110	\$ 626	\$ 214	\$ 1,402	\$ 1,235
Retired Members and Beneficiaries¹					
Count	109,836	3,513	115	113,464	110,724
Average age	70.8	64.7	\$ 65.0	70.6	70.4
Average monthly benefit	\$ 2,249	\$ 637	\$ 353	\$ 2,198	\$ 2,127
Total members	183,888	71,532	90,966	346,386	328,647

1. Dormant and Retiree counts are shown by lives within the system. In other words, a member is counted once for purposes of this exhibit, regardless of their service history for different rate pools. This contrasts with the method used to count inactive participants in some of the later exhibits of this report.

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Effects of Changes

Effective with the December 31, 2010 actuarial valuation the following changes were made.

Assumption Changes

The 2010 Experience Study reviewed economic and demographic assumptions. As a result of the study, the Board adopted revised assumptions as proposed by the study. The key revisions include lowering merit salary increases for some groups, modifying group-specific adjustments to healthy mortality assumptions, and making modest changes to assumptions for disabled mortality, retirement rates, and termination rates. Additional detail on assumption changes is available in the assumptions section of this report and in the 2010 Experience Study report. These changes increased the system-wide Actuarial Accrued Liability by approximately \$243.4 million (consisting of an increase of \$217.2 million for the pension plan and an increase of \$26.2 million for the retiree healthcare plans), decreased the system-wide normal cost by approximately \$26.3 million, (consisting of a reduction of \$27.4 million on the pension plan and an increase of \$1.1 for the retiree healthcare plans) and lowered the average employer contribution rate by approximately 0.2% of payroll.

Method Changes

As a result of the 2010 Experience Study, the Board adopted revised actuarial methods as proposed by the study. These changes included revising the treatment of the Rate Guarantee Reserve when it is deficit status and updating the assumed weighting of the Money Match method when allocating liability for active members among multiple employers. Additional detail on method changes is available in the methods section of this report in the 2010 Experience Study report. These changes did not affect the system-wide actuarial accrued liability or normal cost, but instead affected the way in which contribution rates are determined from the system's assets and liabilities.

Plan Changes

There were no changes to plan provisions since the December 31, 2009, actuarial valuation.

Arken and Robinson Litigation

The liabilities in this report are consistent with our understanding of the Oregon Supreme Court decisions in the Arken and Robinson cases.

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Important Notices

Mercer has prepared this report exclusively for the Oregon Public Employees Retirement System (PERS); Mercer is not responsible for reliance upon this report by any other party. Subject to this limitation, Oregon PERS may direct that this report be provided to its auditors in connection with audits of the Plan or its sponsoring entities.

The only purposes of this report are to:

- Present Mercer's actuarial estimates of the system-wide liabilities and expenses of the Oregon Public Employees Retirement System, including pension benefits provided through Tier 1/Tier 2 and the Oregon Public Service Retirement Plan (OPSRP), and retiree medical benefits provided through the Retiree Health Insurance Account (RHIA) and the Retiree Health Insurance Premium Account (RHIPA), as of December 31, 2010, for PERS to incorporate, as PERS deems appropriate, in its financial statements; and
- Provide advisory information on estimated system-wide average employer contribution rates and employer contribution rates for the School District rate pool and the State and Local Government Rate Pool for the period beginning July 1, 2013.

This report may not be used for any other purpose or by any party other than the Oregon Public Employees Retirement System or, as directed by Oregon PERS, any employer participating in the System or any auditor employed by the System or a participating employer solely for the purpose of completing an audit related to the matters herein. Mercer is not responsible for the consequences of any unauthorized use.

Decisions about benefit changes, granting new benefits, investment policy, funding policy, benefit security and/or benefit-related issues should not be made on the basis of this valuation, but only after careful consideration of alternative economic, financial, demographic and societal factors, including financial scenarios that assume future sustained investment losses.

The Oregon Investment Council (OIC) is solely responsible for selecting the plan's investment policies, asset allocations and individual investments. Mercer's actuaries have not provided any investment advice to the OIC.

A valuation report is only a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a plan's future financial condition or its ability to pay benefits in the future and does not provide any guarantee of the future financial soundness of the plan. Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, the number of people paid benefits, the period of time over which benefits are paid, plan expenses and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date.

Because modeling all aspects of a situation is not possible or practical, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events in an efficient and cost-effective manner. We may also exclude factors or data that are immaterial in our judgment. Use of such simplifying techniques does not, in our judgment, affect the reasonableness of valuation results for the plan.

Important Notices

To prepare this report, *Actuarial Assumptions*, as described in the section of this report entitled "Actuarial Methods and Assumptions," are used in a forward looking financial and demographic model to present a single scenario from a range of possibilities. The results based on that single scenario are included in this report. The future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material because these results are very sensitive to the assumptions made and, in some cases, to the interaction between the assumptions.

Different assumptions or scenarios within the range of possibilities may also be reasonable and results based on those assumptions would be different. As a result of the uncertainty inherent in a forward looking projection over a very long period of time, no one projection is uniquely "correct" and many alternative projections of the future could also be regarded as reasonable. Two different actuaries could, quite reasonably, arrive at different results based on the same data and different views of the future. A "sensitivity analysis" shows the degree to which results would be different if you substitute alternative assumptions within the range of possibilities for those utilized in this report. We have not been engaged to perform such a sensitivity analysis as part of the standard valuation process and thus the results of such an analysis are thus not included in this report. At the request of PERS, Mercer is available to perform such a sensitivity analysis.

Actuarial assumptions may also be changed from one valuation to the next because of changes in mandated requirements, plan experience, changes in expectations about the future and other factors. A change in assumptions is not an indication that prior assumptions were unreasonable when made.

The calculation of actuarial liabilities for valuation purposes is based on a current estimate of future benefit payments. The calculation includes a computation of the "present value" of those estimated future benefit payments using an assumed discount rate; the higher the discount rate assumption, the lower the estimated liability will be. For purposes of estimating the liabilities (future and accrued) in this report, Oregon PERS selected an assumption based on the expected long term rate of return on plan investments. Using a lower discount rate assumption, such as a rate based on long-term bond yields, could substantially increase the estimated present value of future and accrued liabilities.

Because valuations are a snapshot in time and are based on estimates and assumptions that are not precise and will differ from actual experience, contribution calculations are inherently imprecise. There is no uniquely "correct" level of contributions for the coming biennium.

Valuations do not affect the ultimate cost of the plan, only the timing of contributions into the plan. Plan funding occurs over time. Contributions not made this year, for whatever reason, including errors, remain the responsibility of the plan sponsor and can be made in later years. If the contribution levels over a period of years are lower or higher than necessary, it is normal and expected practice for adjustments to be made to future contribution levels to take account of this with a view to funding the plan over time.

Data and Plan Provisions

To prepare this report, Mercer has used and relied on member and financial data submitted by Oregon PERS and as summarized in the *Data* and *System-Wide Assets* sections of this report. Oregon PERS is responsible for ensuring that such participant data provides an accurate description of all persons who are participants under the terms of the plan or otherwise entitled to benefits as of December 31, 2010, that is sufficiently comprehensive and accurate for the purposes of this report. Although Mercer has reviewed the data in accordance with Actuarial Standards of Practice No. 23, Mercer has not verified or audited any of the data or information provided.

Mercer has also used and relied on the plan provisions described in Oregon Revised Statutes Sections 238 and 238A and legislative amendments supplied by the Oregon Public Employees Retirement System. A summary of the plan provisions valued is presented in our report. The Oregon Public Employees Retirement System is solely responsible for the accuracy, validity and

Important Notices

comprehensiveness of this information. If the data or plan provisions supplied are not accurate and complete the valuation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a later revision of this report. Moreover, plan documents may be susceptible to different interpretations, each of which could be reasonable, and the different interpretations could lead to different valuation results.

We understand that the market values of private equity and some real estate investments are reported on a 3-month lag. We have made no adjustment to the reported market value of assets to account for this lag. A very brief discussion of this issue is provided in the Executive Summary.

Data, computer coding and mathematical errors are possible in the preparation of a valuation involving complex computer programming and thousands of calculations and data inputs. Errors in a valuation discovered after its preparation may be corrected by amendment to the valuation or in a subsequent year's valuation.

Actuarial Calculations, Methods, and Assumptions

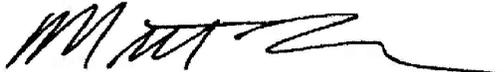
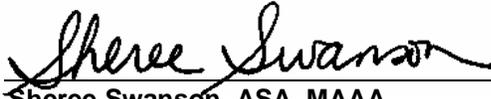
Assumptions used are based on the last experience study, as adopted by the Board on July 29, 2011. The Board is responsible for selecting the plan's funding policy, actuarial valuation methods, asset valuation methods and assumptions. This valuation is based on assumptions, plan provisions, methods and other parameters so prescribed and as summarized in this report. Oregon PERS is solely responsible for communicating to Mercer any changes required thereto.

Oregon PERS should notify Mercer promptly after receipt of the valuation report if it disagrees with anything contained in the valuation report or is aware of any information that would affect the results of the valuation report that has not been communicated to Mercer or incorporated therein. The valuation report will be deemed final and acceptable to Oregon PERS unless it promptly provides such notice to Mercer.

Important Notices

Professional Qualifications

We are available to answer any questions on the material contained in the report or to provide explanations or further details as appropriate. Collectively, the undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest, that would impair the objectivity of our work.

	<p>November 10, 2011</p>
<p>Matthew R. Larrabee, FSA, EA, MAAA Principal</p>	<p>Date</p>
	<p>November 10, 2011</p>
<p>Scott D. Preppernau, FSA, EA, MAAA Senior Associate</p>	<p>Date</p>
<p>The undersigned actuary has reviewed the assumptions related to the health care cost trend rates for the RHIPA program, and hereby affirms her qualification to render opinions in such matters, in accordance with the qualification standards of the American Academy of Actuaries.</p>	
	<p>November 10, 2011</p>
<p>Sheree Swanson, ASA, MAAA Partner Mercer (US), Inc. 111 SW Columbia Avenue, Suite 500 Portland, Oregon 97201-5839 503 273 5900</p>	<p>Date</p>

The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.

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System-Wide Assets

The table below reconciles the market value of assets, as provided by PERS, to the asset values used in this valuation.

	Tier 1/Tier 2	OPSRP	Side Accounts	Contingency and Capital Preservation Reserve	Rate Guarantee Reserve	RHIA and RHIPA	System Totals
Amount reported by PERS							
December 31, 2010	\$ 45,992.1	\$ 659.0	\$ 5,579.2	\$ 734.4	\$ (199.2)	\$ 238.0	\$ 53,003.6
Adjustment for Negative Rate Guarantee Reserve	\$ (199.2)	-	\$ -	\$ -	\$ 199.2	\$ -	\$ -
Net Pre-SLGRP Liabilities	\$ (447.5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (447.5)
December 31, 2010 Actuarial Value of Assets	\$ 45,345.4	\$ 659.0	\$ 5,579.2	\$ 734.4	\$ -	\$ 238.0	\$ 52,556.0

Amounts in millions

PERS calculates the amount that should be transferred from side accounts to employer reserves in Tier 1/Tier 2 and OPSRP for rate relief on a monthly basis. PERS does not track net Pre-SLGRP liabilities.

Employer supplemental deposits establish individual side accounts within the pension trust. The side accounts are treated as prepaid contributions. Employer contribution rates are first determined excluding side accounts. Then, an amortized portion of the side account is used to offset the contribution otherwise required for the individual employers that have side accounts. While side accounts are excluded from valuation assets in determining contribution rates for each of the rate pools, side accounts are included in valuation assets for financial reporting purposes such as the reporting of funded status.

In addition, pension assets are held in the Contingency Reserve, the Capital Preservation Reserve, and the Tier 1 Rate Guarantee Reserve. In prior valuations, all three reserves have been excluded from valuation assets for all purposes. As discussed earlier in this report, the Tier 1 Rate Guarantee Reserve has been in deficit status since the December 31, 2008, actuarial valuation due to recent market losses. As part of the Board's adoption of actuarial assumptions and methods with the 2010 Experience Study, the Board revised the treatment of the RGR so that it would not be excluded from the calculation of valuation assets when it is in deficit status. The adjustment to Tier 1/Tier 2 valuation assets to account for the deficit status of the Tier 1 Rate Guarantee Reserve is shown in the table above. It is our understanding that if a deficit persists for five years, employers may be required to restore the Tier 1 Rate Guarantee Reserve.

Finally, assets are held in separate accounts established under Internal Revenue Code Section 401(h) (the Retirement Health Insurance Account (RHIA) and the Retiree Health Insurance Premium Account (RHIPA)) to provide retiree medical benefits.

System-Wide Assets

The following table reconciles the changes in the system-wide assets from December 31, 2009 to December 31, 2010. The reconciliation of assets is provided by PERS.

Reconciliation of Pension and Retiree Healthcare Assets	Tier 1/Tier 2	OPSRP	Side Accounts	Contingency Reserve	Capital Preservation Reserve	Rate Guarantee Reserve	RHIA and RHIPA	System Totals
Additions								
1. Contributions								
a. Employer	\$ 264.9	\$ 146.7	\$ -	\$ -	\$ -	\$ -	\$ 23.6	\$ 435.2
b. Transfer from side accounts ¹	\$ 558.9	\$ -	\$ (558.9)	\$ -	\$ -	\$ -	\$ -	\$ -
c. Judge member contributions	\$ 1.5	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1.5
d. Member service purchases	\$ 12.8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12.8
e. Total	\$ 838.1	\$ 146.7	\$ (558.9)	\$ -	\$ -	\$ -	\$ 23.6	\$ 449.5
2. Net investment income								
a. Transfers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
b. From investments	\$ 4,970.9	\$ 74.6	\$ 647.8	\$ 81.3	\$ -	\$ 242.6	\$ 26.7	\$ 6,044.0
c. Total	\$ 4,970.9	\$ 74.6	\$ 647.8	\$ 81.3	\$ -	\$ 242.6	\$ 26.7	\$ 6,044.0
3. Other ²	\$ 25.1	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25.1
4. Total additions	\$ 5,834.1	\$ 221.2	\$ 89.0	\$ 81.3	\$ -	\$ 242.6	\$ 50.3	\$ 6,518.6
Deductions								
5. Retirement and survivor benefits	\$ (3,046.7)	\$ (1.6)	\$ -	\$ -	\$ -	\$ -	\$ (31.7)	\$ (3,080.0)
6. Death Benefits	\$ (5.6)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (5.6)
7. Refund of contributions	\$ (18.0)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (18.0)
9. Administrative expenses	\$ (22.8)	\$ (6.1)	\$ (0.2)	\$ -	\$ -	\$ -	\$ (1.1)	\$ (30.2)
10. Total deductions	\$ (3,093.1)	\$ (7.7)	\$ (0.2)	\$ -	\$ -	\$ -	\$ (32.8)	\$ (3,133.8)
11. Net change	\$ 2,741.0	\$ 213.6	\$ 88.8	\$ 81.3	\$ -	\$ 242.6	\$ 17.5	\$ 3,384.8
12. Net assets held in trust for pension benefits								
a. Beginning of year	\$ 43,251.1	\$ 445.4	\$ 5,490.4	\$ 653.1	\$ -	\$ (441.8)	\$ 220.5	\$ 49,618.7
b. End of year	\$ 45,992.1	\$ 659.0	\$ 5,579.2	\$ 734.4	\$ -	\$ (199.2)	\$ 238.0	\$ 53,003.6

¹ Side account transfers shown in this exhibit are all credited to Tier 1/Tier 2 assets. We understand the portion to be credited to OPSRP is credited through the employer contribution line of the exhibit.

² Includes TRFA transfer from Metlife and adjustments by PERS.

Amounts in millions

System-Wide Assets

Reconciliation of Side Accounts

Side accounts are established for employers who make supplemental payments (a lump sum payment in excess of the required employer contribution). For SLGRP employers, this supplemental payment is first applied toward the employer's Transition Liability, and any excess is established in a Side Account. A reconciliation of the side accounts from December 31, 2009, to December 31, 2010, is shown below on a rate pool basis. For this exhibit, all independent employers are grouped together.

	SLGRP	School Districts	Independent Employers	System Totals
Side Accounts, December 31, 2009	\$ 2,592.8	\$ 2,810.6	\$ 86.9	\$ 5,490.4
Deposits during 2010	-	-	-	-
Interest	305.4	332.2	10.3	647.8
Administrative expenses	(0.0)	(0.1)	(0.0)	(0.2)
Transfers to employer reserves	(277.6)	(272.6)	(8.7)	(558.9)
Side Accounts, December 31, 2010	\$ 2,620.5	\$ 2,870.1	\$ 88.5	\$ 5,579.2

Amounts in millions

Development of Side Account Rate Relief

The rate relief attributable to an employer's side account is determined by amortizing the side account balance on the valuation date over the period ending December 31, 2027 and expressing the result as a percentage of combined valuation payroll. The table below shows the average rate relief attributable to side accounts for each rate pool.

	December 31, 2010			
	SLGRP	School Districts	Independent Employers	System Totals
1. Side Account	\$ 2,620.5	\$ 2,870.1	\$ 88.5	\$ 5,579.2
2. Combined valuation payroll	\$ 4,973.4	\$ 2,950.7	\$ 826.0	\$ 8,750.1
3. Amortization Factor	12.134	12.134	12.134	12.134
4. Average Side Account Rate Relief	4.34%	8.02%	0.88%	5.25%

Amounts in millions

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Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Assets

Summary of Actuarial Value of Assets

This section summarizes the current Tier 1/Tier 2 pension valuation assets as of the current and prior actuarial valuation. For valuation purposes, pension assets are divided among the State & Local Government Rate Pool (SLGRP), the School District Pool, and various independent employers to determine employer contribution rates. For this system-wide report, all independent employers, including State Judiciary, have been grouped together as if they were a rate pool.

	SLGRP	School Districts	Independent Employers	Tier 1/Tier 2 Totals ¹
December 31, 2010				
Member reserves ²	\$ 4,682.4	\$ 2,806.3	\$ 719.6	\$ 8,208.7
Employer reserves	9,747.9	5,585.9	1,745.6	16,935.0
Benefit in force reserves	9,896.2	9,081.1	1,635.7	20,649.2
Net outstanding pre-SLGRP liabilities	(447.5)			(447.5)
Total actuarial value of assets	\$ 23,879.0	\$ 17,473.3	\$ 4,100.9	\$ 45,345.4
December 31, 2009				
Member reserves	\$ 4,746.8	\$ 2,905.8	\$ 738.7	\$ 8,392.0
Employer reserves	8,811.7	4,954.9	1,580.0	15,209.6
Benefit in force reserves	9,375.1	8,716.7	1,521.0	19,649.5
Net outstanding pre-SLGRP liabilities	(457.7)			(457.7)
Total actuarial value of assets	\$ 22,476.0	\$ 16,577.4	\$ 3,839.7	\$ 42,793.4

Amounts in millions

¹ Includes Multnomah Fire District #10.

² For the valuation, reported member reserves were reduced by \$199.2 million to reflect the deficit status of the Tier 1 Rate Guarantee Reserve.

Please note that pre-SLGRP liabilities are treated as loans from the SLGRP to the individual employer and pre-SLGRP surpluses are treated as loans from the individual employer to the SLGRP. The assets of the SLGRP used to calculate the pooled contribution rate reflect the net outstanding balance of these loans.

Side accounts are treated as pre-paid contributions. Consequently, they are not reflected in the actuarial value of assets shown above. The actuarial value of assets for each rate pool is used

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Assets

to develop the contribution rate for that pool. Side accounts are used to adjust the pooled contribution rate for individual employers. The net impact of side accounts is shown in a separate section of this report.

Reconciliation of Actuarial Value of Assets

The table below shows a reconciliation of the actuarial value of assets from the prior valuation to the current valuation for each of the rate pools. Again, independent employers, including State Judiciary, are treated as if they were a single rate pool for purposes of the system-wide report.

	SLGRP	School Districts	Independent Employers	Tier 1/Tier 2 Totals ¹
Actuarial value of assets, December 31, 2009	\$ 22,476.0	\$ 16,577.4	\$ 3,839.7	\$ 42,793.4
Contributions				
Employer	\$ 154.6	\$ 96.7	\$ 62.1	\$ 313.5
Side account transfers	277.6	272.6	8.7	558.9
Member	0.0	0.0	1.5	1.5
Total contributions	432.2	369.3	72.4	873.8
Investment income	2,576.8	1,885.5	442.7	4,889.1
Benefit payments and expenses	(1,482.5)	(1,360.4)	(245.0)	(3,093.3)
Adjustments ²	(123.5)	1.6	(8.8)	(117.7)
Actuarial value of assets, December 31, 2010	\$ 23,879.0	\$ 17,473.3	\$ 4,100.9	\$ 45,345.4

Amounts in millions

¹ Includes Multnomah Fire District #10.

² Adjustments include a reallocation of the benefits in force reserve, exclusion of the negative Tier 1 Rate Guarantee Reserve from the member reserve, transfers to Multnomah Fire District #10, member service purchases and other adjustments made by PERS.

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Assets

Outstanding Balance of Pre-SLGRP Liabilities

In the valuation, pre-SLGRP liabilities are treated as assets of the SLGRP. That is, a pre-SLGRP liability is essentially a debt owed to the SLGRP by the employer. Pre-SLGRP surpluses are essentially loans by employers to the SLGRP.

Prior to the formation of the SLGRP, the State and Community Colleges were pooled together and some employers participated in the Local Government Rate Pool (LGRP). The UAL attributable to the State and Community Colleges or the LGRP at the time the SLGRP was formed is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate.

Similarly, when an independent employer joins the SLGRP, a transition liability or surplus is calculated to ensure that each employer enters the pool on a comparable basis. The transition liability is maintained separately from the SLGRP, and is reduced by contributions and increased for interest charges at the assumed interest rate. The table below shows the reconciliation of the pre-SLGRP pooled liability attributable to the State and Community Colleges and the LGRP from the last valuation to the current valuation. It also shows the reconciliation of the total transition liability or surplus from the last valuation to the current valuation.

	State and Community Colleges	Local Government Rate Pool	Transition	Total
1. Pre-SLGRP liability/(surplus), January 1, 2010	\$ 619.5	\$ (256.6)	\$ (820.6)	\$ (457.7)
2. Employer contributions	(55.6)	21.9	76.9	43.3
3. Supplemental payments	0.0	0.0	0.0	0.0
4. Interest	45.1	(18.8)	(59.5)	(33.2)
5. Pre-SLGRP liability/(surplus), December 31, 2010 (1. + 2. + 3. + 4.)	\$ 609.1	\$ (253.4)	\$ (803.2)	\$ (447.5)

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension 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.

Because no additional Member contributions are permitted, the Money Match formula is allocated entirely to prior years of service. Consequently, Members who are expected to retire under the Money Match formula have no normal cost.

A summary of the normal cost by decrement is shown below on a system-wide basis for the Tier 1/Tier 2 pension benefits.

		December 31, 2010		December 31, 2009	Percent Change
Normal Cost					
Service Retirement	\$	477.2	\$	488.3	(2.3%)
Vested Benefits		27.2		26.4	3.3%
Duty Disability		1.4		1.2	16.2%
Nonduty Disability		9.2		8.8	4.6%
Death		0.0		0.0	0.2%
Total Normal Cost	\$	515.1	\$	524.8	(1.8%)

Amounts in millions

The decrease in the normal cost since the prior valuation is attributable to differences in actual plan experience compared to assumed experience, including lower than expected member salary increases, and assumption changes adopted based on the 2010 Experience Study. These factors are offset somewhat by the expected increase in pension normal cost. The expected increase for the pension normal cost is due to both the aging of the Tier 1/Tier 2 membership and the expected shift from Money Match to Full Formula benefits. The table below reconciles the normal cost from the prior valuation to the current valuation.

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Liabilities

	Tier 1/Tier 2 Pension	
Normal Cost, December 31, 2009	\$	524.8
Expected increase		28.4
Assumption changes		(22.7)
Plan changes		-
Deviations from expected experience		
Age and service retirements from active status		2.4
Active mortality and withdrawal		(4.2)
Pay increases		(18.2)
Interest Crediting Experience		(0.5)
All other sources		5.1
Total demographic (gains) and losses		(15.4)
Normal Cost, December 31, 2010	\$	515.1

Amounts in millions

A summary of the normal cost by tier and employment category for each rate pool is shown below. Again, independent employers, including State Judiciary, are treated as if they were a single rate pool for purposes of the system-wide report.

	December 31, 2010				December 31, 2009		Percent Change
	SLGRP	School Districts	Independent Employers	Tier 1/ Tier 2 Totals	Tier 1/ Tier 2 Totals		
Normal Cost							
Tier 1 General Service	\$ 86.3	\$ 63.5	\$ 14.0	\$ 163.8	\$	176.1	(7.0%)
Tier 2 General Service	128.0	92.6	18.4	239.0		230.6	3.6%
Tier 1 Police & Fire	41.3	0.4	15.2	56.9		63.6	(10.4%)
Tier 2 Police & Fire	43.0	0.2	12.2	55.4		54.5	1.7%
Total Normal Cost	\$ 298.7	\$ 156.6	\$ 59.8	\$ 515.1	\$	524.8	(1.8%)

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Liabilities

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. A summary of the actuarial accrued liability by decrement is shown below on a system-wide basis for the Tier 1/Tier 2 pension benefits.

	December 31, 2010		December 31, 2009		Percent Change
Active					
Service Retirement	\$	17,946.7	\$	17,885.7	0.3%
Vested Benefits		1,013.0		1,067.5	(5.1%)
Duty Disability		48.3		46.6	3.7%
Nonduty Disability		324.8		351.1	(7.5%)
Death		234.4		222.0	5.6%
Total Actives	\$	19,567.2	\$	19,572.9	(0.0%)
Dormant Members		4,994.7		4,630.0	7.9%
Retired Members and Beneficiaries		34,000.0		32,072.7	6.0%
Total Actuarial Accrued Liability	\$	58,561.9	\$	56,275.0	4.1%

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Liabilities

Actuarial Accrued Liability

A summary of actuarial accrued liabilities based on member status, tier and employment category is shown in the table below. For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	December 31, 2010				December 31, 2009		Percent Change
	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals ¹	Tier 1 / Tier 2 Totals ¹		
Active Members							
Tier 1 General Service	\$ 7,489.4	\$ 5,728.9	\$ 1,000.5	\$ 14,219.0	\$ 14,589.1	(2.5%)	
Tier 1 Police & Fire	1,331.8	7.2	486.1	1,825.6	1,862.9	(2.0%)	
Tier 1 Total	\$ 8,821.2	\$ 5,736.1	\$ 1,486.6	\$ 16,044.6	\$ 16,451.9	(2.5%)	
Tier 2 General Service	1,564.1	1,098.1	231.6	\$ 2,893.8	2,557.7	13.1%	
Tier 2 Police & Fire	494.0	3.2	131.5	628.8	562.7	11.7%	
Tier 2 Total	\$ 2,058.1	\$ 1,101.3	\$ 363.2	\$ 3,522.6	\$ 3,120.4	12.9%	
Total Active Members	\$ 10,879.3	\$ 6,837.4	\$ 1,849.8	\$ 19,567.2	\$ 19,572.4	(0.0%)	
Dormant Members	3,111.0	1,513.3	370.0	4,994.7	4,630.0	7.9%	
Retired Members and Beneficiaries	16,294.7	14,952.6	2,693.3	34,000.0	32,072.7	6.0%	
Total Tier 1/ Tier 2 Pension Liability, December 31,	\$ 30,285.0	\$ 23,303.3	\$ 4,913.1	\$ 58,561.9	\$ 56,275.0	4.1%	

Amounts in millions

¹ Includes Multnomah Fire District #10.

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Liabilities

Actuarial Accrued Liability

The change in actuarial accrued liability since the last valuation reflects the experience of the system. The table below reconciles the actuarial accrued liability from the last valuation to this valuation. The actuarial accrued liability is expected to increase due to benefits earned during the year and interest, and to decrease due to benefits paid during the year.

	Tier 1/Tier 2 Pension	
Actuarial Accrued Liability December 31, 2009	\$	56,275.0
Expected change		1,875.6
Assumption changes		235.1
Plan changes		-
Deviations from expected experience		
Retirements from active status		122.6
Active mortality and withdrawal		46.0
Pay increases		(139.6)
Interest Crediting Experience		70.0
Retirement, mortality and lump sums from dormant status		14.1
Retiree and beneficiary mortality		15.5
Data Corrections		5.2
Other		42.3
Total demographic (gains) and losses		176.1
Actuarial Accrued Liability December 31, 2010	\$	58,561.9

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Unfunded Accrued Liability (UAL)

Calculation of UAL

The Unfunded Accrued Liability (UAL) represents the difference between the actuarial accrued liability and the valuation assets. To determine employer contribution rates, the UAL is calculated excluding side accounts. The calculated contribution rate is later offset by an amortized portion of the side accounts for individual employers with such accounts. A summary of the UAL by rate pool is shown on the following table. All independent employers, including State Judiciary, have been grouped together.

	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals ¹
December 31, 2010				
1. Actuarial accrued liability	\$ 30,285.0	\$ 23,303.3	\$ 4,913.1	\$ 58,561.9
2. Actuarial value of assets	\$ 23,879.0	\$ 17,473.3	\$ 4,100.9	\$ 45,345.4
3. Unfunded accrued liability	\$ 6,405.9	\$ 5,829.9	\$ 812.2	\$ 13,216.5
4. Funded percentage (2. ÷ 1.)	78.8%	75.0%	83.5%	77.4%
5. Combined Valuation Payroll	\$ 4,973.4	\$ 2,950.7	\$ 826.0	\$ 8,750.1
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	128.8%	197.6%	98.3%	151.0%
December 31, 2009				
1. Actuarial accrued liability	\$ 29,029.1	\$ 22,517.6	\$ 4,665.9	\$ 56,275.0
2. Actuarial value of assets	\$ 22,476.0	\$ 16,577.4	\$ 3,839.7	\$ 42,793.4
3. Unfunded accrued liability	\$ 6,553.1	\$ 5,940.2	\$ 826.2	\$ 13,481.6
4. Funded percentage (2. ÷ 1.)	77.4%	73.6%	82.3%	76.0%
5. Combined Valuation Payroll	\$ 4,850.1	\$ 2,873.7	\$ 788.4	\$ 8,512.2
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	135.1%	206.7%	104.8%	158.4%

Amounts in millions

¹ Includes Multnomah Fire District #10

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Unfunded Accrued Liability (UAL)

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each odd-year valuation establishes a 20-year closed-period amortization base for outstanding regular Tier 1/Tier 2 UAL amounts. For odd-year valuations subsequent to December 31, 2007, this amortization base is calculated based on the total Tier 1/Tier 2 UAL as of that valuation date less the remaining unamortized balance of any Tier 1/Tier 2 UAL bases established at previous odd-year valuation dates. In other words, Tier 1/Tier 2 experience from December 31, 2009 to December 31, 2011 will be amortized on a 20-year basis in the December 31, 2011 valuation. This even-year advisory valuation shows both the progress of the amortization bases established in prior valuations and an estimate of the base to be established on December 31, 2011, with the estimate based on experience during 2010.

The UAL bases are shown for the SLGRP and School District rate pools below. UAL bases for independent employers are developed individually for each employer, and are shown in the employer's individual valuation report.

SLGRP

Amortization Base	UAL			UAL			Next Year's Payment
	December 31, 2009	Payment	Interest	December 31, 2010			
December 31, 2007	\$ (451.9)	\$ (35.8)	\$ (34.6)	\$ (450.7)		\$ (37.1)	
December 31, 2009	7,005.0	517.3	538.4	7,026.1		536.7	
December 31, 2010	N/A	N/A	N/A	(169.4)		(12.5)	
Total	\$ 6,553.1	\$ 481.5	\$ 503.8	\$ 6,405.9		\$ 487.1	

School Districts

Amortization Base	UAL			UAL			Next Year's Payment
	December 31, 2009	Payment	Interest	December 31, 2010			
December 31, 2007	\$ 603.5	\$ 47.8	\$ 46.2	\$ 602.0		\$ 49.6	
December 31, 2009	5,336.7	394.1	410.2	5,352.7		408.9	
December 31, 2010	N/A	N/A	N/A	(124.8)		(9.2)	
Total	\$ 5,940.2	\$ 441.9	\$ 456.4	\$ 5,829.9		\$ 449.3	

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

In every actuarial valuation, assumptions are made as to the future experience of the plan and covered group of participants. Whenever there is a difference between the actual experience and that anticipated by the actuarial assumptions, there is a gain or loss to the plan. Gains are the result of experience that is more favorable than anticipated (i.e., serves to reduce the unfunded actuarial liability or increase the surplus), while losses are the result of unfavorable experience.

The table below shows the development of the actuarial gain (or loss) for the Tier 1/Tier 2 pension benefits for the year ending December 31, 2010. For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	December 31, 2010			
	SLGRP	School District	Independent Employers	Tier 1/Tier 2 Totals ¹
1. Expected actuarial accrued liability				
a. Actuarial accrued liability at January 1, 2010	\$ 29,029.1	\$ 22,517.6	\$ 4,665.9	\$ 56,275.0
b. Normal cost at January 1, 2010	\$ 307.9	\$ 156.9	\$ 59.9	\$ 524.8
c. Benefit payments for fiscal year ending December 31, 2010	\$ (1,471.5)	\$ (1,350.3)	\$ (243.2)	\$ (3,070.3)
d. Interest	\$ 2,288.1	\$ 1,759.9	\$ 368.3	\$ 4,421.2
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	\$ 30,153.7	\$ 23,084.1	\$ 4,851.0	\$ 58,150.7
f. Change in actuarial accrued liability at December 31, 2010, due to assumption changes	\$ 101.8	\$ 132.8	\$ 0.4	\$ 235.2
g. Expected actuarial accrued liability at December 31, 2010 (e. + f.)	\$ 30,255.5	\$ 23,216.9	\$ 4,851.4	\$ 58,385.9
2. Actuarial accrued liability at December 31, 2010	\$ 30,285.0	\$ 23,303.3	\$ 4,913.1	\$ 58,561.9
3. Liability gain/(loss) (1.g. - 2)	\$ (29.5)	\$ (86.3)	\$ (61.7)	\$ (175.9)
4. Expected actuarial value of assets				
a. Actuarial value of assets at January 1, 2010	\$ 22,476.0	\$ 16,577.4	\$ 3,839.7	\$ 42,793.4
b. Actual contributions for 2010	\$ 432.2	\$ 369.3	\$ 72.4	\$ 873.8
c. Benefit payments and expenses for fiscal year ending December 31, 2010	\$ (1,482.5)	\$ (1,360.4)	\$ (245.0)	\$ (3,093.3)
d. Interest	\$ 1,756.1	\$ 1,286.5	\$ 300.3	\$ 3,334.7
e. Expected actuarial value of assets before changes (a. + b. + c. + d.)	\$ 23,181.8	\$ 16,872.8	\$ 3,967.3	\$ 43,908.6
f. Change in actuarial value of assets at December 31, 2010, due to assumption changes	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
g. Expected actuarial value of assets at December 31, 2010 (e. + f.)	\$ 23,181.8	\$ 16,872.8	\$ 3,967.3	\$ 43,908.6
5. Actuarial value of assets as of December 31, 2010	\$ 23,879.0	\$ 17,473.3	\$ 4,100.9	\$ 45,345.4
6. Asset gain/(loss) (5. - 4.g.)	\$ 697.2	\$ 600.6	\$ 133.6	\$ 1,436.8
7. Net actuarial gain/(loss) (3. + 6.)	\$ 667.8	\$ 514.2	\$ 71.9	\$ 1,260.8

Amounts in millions

¹ Includes Multnomah Fire District #10

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Unfunded Accrued Liability (UAL)

Reconciliation of the UAL

The table below develops the UAL. For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals ¹
UAL, December 31, 2009	\$ 6,553.1	\$ 5,940.2	\$ 826.2	\$ 13,481.6
Expected Increase	851.0	640.4	129.8	1,634.3
Contributions	(432.2)	(369.3)	(72.4)	(873.8)
Liability (gain) or loss	29.5	86.3	61.7	175.9
Asset (gain) or loss	(697.2)	(600.6)	(133.6)	(1,436.8)
Assumption changes	101.8	132.8	0.4	235.2
UAL, December 31, 2010	\$ 6,405.9	\$ 5,829.9	\$ 812.2	\$ 13,216.5

Amounts in millions

¹ Includes Multnomah Fire District #10

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

Normal Cost Rates

The table below shows the development of the system-wide weighted average normal cost rate.

	December 31, 2010	December 31, 2009	Percent Change
Normal Cost			
a. Service Retirement	\$ 477.2	\$ 488.3	(2.3%)
b. Vested Benefits	27.2	26.4	3.3%
c. Duty Disability	1.4	1.2	16.2%
d. Nonduty Disability	9.2	8.8	4.6%
e. Death	0.0	0.0	0.2%
f. Total Normal Cost	\$ 515.1	\$ 524.8	(1.8%)
Tier 1/ Tier 2 Valuation Payroll	\$ 5,930.3	\$ 6,123.4	(3.2%)
Average Normal Cost Rate			
a. Service Retirement	8.05%	7.97%	
b. Vested Benefits	0.46%	0.43%	
c. Duty Disability	0.02%	0.02%	
d. Nonduty Disability	0.16%	0.14%	
e. Death	0.00%	0.00%	
f. Average Normal Cost Rate	8.69%	8.57%	

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

The table below shows the development of the normal cost rate for the various rate pools. For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	December 31, 2010			
	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals
Normal Cost				
Tier 1 General Service	\$ 86.3	\$ 63.5	\$ 14.0	\$ 163.8
Tier 2 General Service	\$ 128.0	\$ 92.6	\$ 18.4	\$ 239.0
Tier 1 Police & Fire	\$ 41.3	\$ 0.4	\$ 15.2	\$ 56.9
Tier 2 Police & Fire	\$ 43.0	\$ 0.2	\$ 12.2	\$ 55.4
Total Normal Cost	\$ 298.7	\$ 156.6	\$ 59.8	\$ 515.1
Tier 1/ Tier 2 Valuation Payroll				
Tier 1 General Service	\$ 1,529.0	\$ 1,126.8	\$ 201.4	\$ 2,857.1
Tier 2 General Service	\$ 1,237.6	\$ 896.9	\$ 181.0	\$ 2,315.5
Tier 1 Police & Fire	\$ 280.6	\$ 2.5	\$ 100.5	\$ 383.5
Tier 2 Police & Fire	\$ 285.9	\$ 1.4	\$ 86.8	\$ 374.1
Total Valuation Payroll	\$ 3,333.1	\$ 2,027.5	\$ 569.7	\$ 5,930.3
Average Normal Cost Rates				
Tier 1 General Service	5.65%	5.63%	6.94%	5.73%
Tier 2 General Service	10.34%	10.32%	10.19%	10.32%
Tier 1 Police & Fire	14.74%	14.21%	15.15%	14.84%
Tier 2 Police & Fire	15.03%	17.85%	14.04%	14.81%
Average Rates				
Tier 1 Average	7.06%	5.65%	9.67%	6.81%
Tier 2 Average	11.22%	10.33%	11.44%	10.95%
General Service Average	7.75%	7.71%	8.48%	7.79%
Police & Fire Average	14.88%	15.50%	14.64%	14.83%
System Average	8.96%	7.72%	10.50%	8.69%
Member Contributions			0.20%	0.02%
Employer System Average	8.96%	7.72%	10.30%	8.67%

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

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.

The following table develops the UAL rate separately for each of the rate pools. For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals ¹
December 31, 2010				
1. Total UAL	\$ 6,405.9	\$ 5,829.9	\$ 812.2	\$ 13,216.5
2. Next year's UAL payment	487.1	449.3	60.2	996.5
3. Combined valuation payroll	\$ 4,973.4	\$ 2,950.7	\$ 826.0	\$ 8,750.1
4. UAL rate (2 ÷ 3)	9.79%	15.23%	7.29%	11.39%
December 31, 2009				
1. Total UAL	\$ 6,553.1	\$ 5,940.2	\$ 826.2	\$ 13,481.6
2. Next year's UAL payment	481.5	441.9	59.3	982.8
3. Combined valuation payroll	\$ 4,850.1	\$ 2,873.7	\$ 788.4	\$ 8,512.2
4. UAL rate (2 ÷ 3)	9.93%	15.38%	7.52%	11.55%

Amounts in millions

¹ While the Tier 1/Tier 2 Total UAL amount includes the UAL for Multnomah Fire District #10 (MFD), the UAL rate for MFD is developed separately in this report and is added to the rates shown in this table.

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

Pre-SLGRP Pooled Rate

Prior to the formation of the SLGRP, the State and Community Colleges were pooled together and some employers participated in the Local Government Rate Pool (LGRP). The UAL attributable to the State and Community Colleges and the LGRP at the time the SLGRP was formed is maintained separately from the UAL for the SLGRP. The balance of the pre-SLGRP pooled liability attributable to the State and Community Colleges or the LGRP on the valuation date is amortized over the period ending December 31, 2027, and expressed as a percentage of combined valuation payroll.

	December 31, 2010		December 31, 2009	
State and Community College Pool				
1. Total pre-SLGRP pooled liability	\$	609.1	\$	619.5
2. Combined valuation payroll	\$	2,777.2	\$	2,733.4
3. Amortization Factor		12.134		12.622
4. Pre-SLGRP pooled rate (1. ÷ 2. ÷ 3.)		1.81%		1.80%
Local Government Rate Pool				
1. Total pre-SLGRP pooled liability	\$	(253.4)	\$	(256.6)
2. Combined valuation payroll	\$	1,232.6	\$	1,196.8
3. Amortization Factor		12.134		12.622
4. Pre-SLGRP pooled rate (1. ÷ 2. ÷ 3.)		(1.69%)		(1.70%)

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

Transition Liability or Surplus Rate

When an employer joins the SLGRP, a transition liability or surplus is calculated to ensure that each employer enters the pool on a comparable basis. The transition liability is maintained separately from the UAL for the SLGRP. The transition liability for an employer who joined the SLGRP while a separate UAL base was being tracked for the change to the PUC method was divided into a portion attributable to the change to PUC and a regular transition liability. It is anticipated that the PUC transition liability/(surplus) will be fully amortized by the conclusion of the biennium ending on June 30, 2011. As a result, in the December 31, 2009 valuation only the "Regular transition liability / (surplus)" was used in the calculation of advisory rates for the biennium commencing July 1, 2013. The regular transition liability is amortized over the period ending December 31, 2027, and is expressed as a percentage of combined valuation payroll. After December 31, 2009, the PUC transition liability/(surplus) is not tracked.

	December 31, 2010		December 31, 2009	
1. Total transition liability / (surplus)	\$	(803.2)	\$	(820.6)
2. Transition liability / (surplus) - change to PUC	\$	0.0	\$	(4.7)
3. Regular transition liability / (surplus) (1. - 2.)	\$	(803.2)	\$	(815.9)
4. Combined valuation payroll	\$	2,033.1	\$	1,959.9
5. Amortization Factor		12.134		12.622
6. Average regular transition liability/(surplus) rate (3. ÷ 4. ÷ 5.)		(3.26%)		(3.30%)

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

Multnomah FD #10 UAL Rate

The Multnomah FD #10 UAL rate is determined by amortizing Multnomah FD #10's unfunded actuarial accrued liability over the period ending December 31, 2027, and expressing the result as a percentage of combined valuation payroll.

As part of the 2003 Legislation, the Multnomah FD#10 UAL was allocated to Tier 1/Tier 2 employers. Multnomah FD#10 was allocated \$50,000 of the outstanding UAL, which was fully paid in November, 2003. Of the remaining UAL, City of Portland is allocated 21.8743%, while all Tier 1/Tier 2 employers, including City of Portland, share in the remaining 78.1257%. In addition, four other employers (City of Gresham, City of Fairview, City of Wood Village, and City of Troutdale) are required to pay twice the rate that is determined under item 6.b. below. Thus, the combined valuation payroll for all Tier 1/Tier 2 employers, shown below in item 4.b., includes twice the valuation payroll for those four employers.

	December 31, 2010		December 31, 2009	
1. Actuarial accrued liability				
a. Active members	\$	0.6	\$	0.8
b. Dormant members	\$	0.5	\$	2.0
c. Retired members and beneficiaries	\$	59.4	\$	59.7
d. Total actuarial accrued liability	\$	60.5	\$	62.5
2. Actuarial value of assets				
a. Employer reserve	\$	(144.4)	\$	(136.9)
b. Members reserve	\$	0.5	\$	0.7
c. Benefits in force reserve	\$	36.1	\$	36.6
d. Total actuarial value of assets	\$	(107.9)	\$	(99.6)
3. Multnomah FD #10 UAL	\$	168.4	\$	162.1
a. Portion allocated to City of Portland (21.8743% x 3.)	\$	36.8	\$	35.5
b. Portion allocated to all T1/T2 employers (78.1257% x 3.)	\$	131.6	\$	126.7
4. Combined valuation payroll				
a. City of Portland	\$	307.5	\$	303.9
b. All Tier 1 / Tier 2 employers	\$	8,797.6	\$	8,557.7
5. Amortization factor		12.134		12.622
6. Multnomah FD #10 UAL Rate				
a. City of Portland (3.a. ÷ 4.a. ÷ 5.)		0.99%		0.92%
b. All Tier 1 / Tier 2 employers (3.b. ÷ 4.b. ÷ 5.)		0.12%		0.12%
7. Total Multnomah FD #10 UAL Rate				
a. City of Portland (6.a. + 6.b.)		1.11%		1.04%
b. City of Gresham, City of Fairview, City of Wood Village, City of Troutdale (2 x 6.b.)		0.24%		0.24%
c. All other Tier 1 / Tier 2 employers (6.b.)		0.12%		0.12%

Amounts in millions

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

Calculated Employer Contribution Rate Summary (Pre-Rate Collar)

The following table summarizes the development of the total Tier 1/Tier 2 contribution rate for each rate pool as of the valuation date. The normal cost rates apply to Tier 1/Tier 2 payroll only, but all other rates are applied to combined valuation payroll. These rates are adjusted on an individual employer basis for side accounts and pre-SLGRP liabilities, if applicable. Weighted average adjustments for side accounts and pre-SLGRP liabilities are shown in the table. For individual employers, these adjustments cannot reduce the pension contribution rate below 0.0%. For purposes of this exhibit, independent employers, including State Judiciary, have been treated as a single rate pool.

	Advisory July 1, 2013 Rates			
	Calculated as of December 31, 2010			
	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals
Tier 1/Tier 2 pension contribution rates				
Employer normal cost rate	8.96%	7.72%	10.30%	8.67%
Member normal cost rate			0.20%	0.02%
UAL rate	9.79%	15.23%	7.29%	11.39%
Multnomah FD #10 rate	0.18%	0.12%	0.13%	0.15%
Total Tier 1/Tier 2 pension rate	18.93%	23.07%	17.92%	20.23%
Average adjustments				
Pre-SLGRP liability/(surplus) rate	(0.74%)	N/A	N/A	(0.42%)
Side account rate	(4.34%)	(8.02%)	(0.88%)	(5.25%)
Total average adjustment	(5.08%)	(8.02%)	(0.88%)	(5.67%)
Net pension contribution rate	13.85%	15.05%	17.04%	14.56%

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

Calculation of Rate Collar

Employer contribution rates cannot change by more than the greater of 3 percentage points or 20% of the current contribution rate. However, if the funded percentage is below 70% or above 130%, the size of the collar is doubled. If the funded percentage is between 70% and 80% or between 120% and 130%, the size of the rate collar is increased on a graded scale. All collar calculations are performed excluding amounts and contribution rates attributable to pre-SLGRP liabilities, side accounts and member contributions. Retiree medical rates are also excluded from the rate collar calculation.

The table below develops the impact of the collar for each of the Tier 1/Tier 2 rate pools. Although the calculation is performed individually for independent employers, the table shows the calculation as if independent employers were a pool. Note that independent employers, other than the State Judiciary, are subject to a minimum employer contribution rate of 6.0% that is not taken into account in the calculation below.

Calculation of Collar Adjustments	Advisory July 1, 2013 Rates Calculated as of December 31, 2010			
	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals ¹
1. Current employer contribution rate	15.05%	18.81%	14.28%	16.25%
2. Size of rate collar				
a. Preliminary size of rate collar (<i>maximum of 3% or 20% x 1.</i>)	3.01%	3.76%	3.00%	3.25%
b. Funded percentage	79%	75%	83%	77%
c. Size of rate collar (If b. < 70% or b. > 130%, 2 x a. If b. is 80%-120%, a. Otherwise, a graded rate between a. and 2 x a.)	3.31%	5.64%	3.00%	
3. 7/1/2013 Minimum employer contribution rate (1. - 2.c.)	11.74%	13.17%	11.28%	
4. 7/1/2013 Maximum employer contribution rate (1. + 2.c.)	18.36%	24.45%	17.28%	
5. Advisory July 1, 2013 employer contribution rate before collar	18.93%	23.07%	17.92%	
6. Advisory July 1, 2013 employer contribution rate after collar (5., but not less than 3. or more than 4.)	18.36%	23.07%	17.28%	
7. Impact of collar (6. - 5.)²	-0.57%	0.00%	-0.64%	-0.38%

¹ The average Tier 1/Tier 2 rate has been recalculated based on current valuation payroll.

² The impact of collar shown for the system-wide column is the weighted average of the impact shown for each rate pool.

Pension Plan Valuation

Tier 1/Tier 2 Valuation

Tier 1/Tier 2 Pension Contribution Rate Development

Calculated Employer Contribution Rate Summary (Post Rate Collar)

Any adjustment for the collar is made to the UAL rate. The table below summarizes the average rates that would be effective July 1, 2013, by pool and component if the December 31, 2010 actuarial valuation determined those rates. The December 31, 2011, valuation will determine the actual contribution effective July 1, 2013. Although the rate collar is applied individually for independent employers, the table shows the average rates as if independent employers were a pool. Note that independent employers, other than the State Judiciary, are subject to a minimum employer contribution rate of 6.0% that is not taken into account in the average rates below.

	Advisory July 1, 2013 Rates			
	Calculated as of December 31, 2010			
	SLGRP	School Districts	Independent Employers	Tier 1 / Tier 2 Totals
Tier 1/Tier 2 pension contribution rates				
Employer normal cost rate	8.96%	7.72%	10.30%	8.67%
Member normal cost rate			0.20%	0.02%
UAL rate	9.22%	15.23%	6.65%	11.01%
Multnomah FD #10 rate	0.18%	0.12%	0.13%	0.15%
Total Tier 1/Tier 2 pension rate	18.36%	23.07%	17.28%	19.85%
Average adjustments				
Pre-SLGRP liability/(surplus) rate	(0.74%)	N/A	N/A	(0.42%)
Side account rate	(4.34%)	(8.02%)	(0.88%)	(5.25%)
Total average adjustment	(5.08%)	(8.02%)	(0.88%)	(5.67%)
Net pension contribution rate	13.28%	15.05%	16.40%	14.18%

Pension Plan Valuation

OPSRP Valuation

OPSRP Assets

Information on OPSRP assets is shown in the section of this report covering the system-wide assets. As of December 31, 2010, the actuarial value of assets for OPSRP is \$659.0 million.

OPSRP 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.

A summary of the normal cost by decrement is shown below for the current and prior year.

	December 31, 2010			December 31, 2009		
	General Service	Police & Fire	Total	General Service	Police & Fire	Total
Pre-Retirement Disability						
Duty	\$ 0.5	\$ 0.4	\$ 0.9	\$ 0.5	\$ 0.3	\$ 0.8
Non-Duty	4.4	0.5	4.9	4.0	0.5	4.4
Total Pre-Retirement Disability	\$ 4.9	\$ 0.9	\$ 5.8	\$ 4.4	\$ 0.8	\$ 5.2
Other Benefits						
Service Retirement	\$ 121.4	\$ 20.2	\$ 141.6	\$ 103.2	\$ 16.9	\$ 120.1
Vested Benefits	18.2	2.1	20.3	14.4	1.8	16.1
Death	1.8	0.2	2.0	1.5	0.2	1.7
Duty Disability Retirement	0.2	0.2	0.4	0.2	0.2	0.4
Non-Duty Disability Retirement	2.2	0.3	2.5	2.4	0.3	2.8
Total Other Benefits	\$ 143.8	\$ 23.0	\$ 166.8	\$ 121.7	\$ 19.4	\$ 141.1
Assumed Administrative Expenses	\$ 5.9	\$ 0.7	\$ 6.6	\$ 5.9	\$ 0.7	\$ 6.6
Total Normal Cost	\$ 154.7	\$ 24.5	\$ 179.2	\$ 132.0	\$ 20.9	\$ 152.9

Amounts in millions

The increase in the normal cost since the prior valuation is primarily attributable to the new entrants to the OPSRP program. The table below reconciles the normal cost from the prior valuation to the current valuation.

	OPSRP
Normal Cost, December 31, 2009	\$ 152.9
Expected increase	5.5
Assumption changes	(4.7)
Plan changes	-
New entrants	24.0
Deviations from expected experience	1.4
Normal Cost, December 31, 2010	\$ 179.2

Amounts in millions

Pension Plan Valuation

OPSRP Valuation

OPSRP Assets

Actuarial Accrued Liability

The actuarial accrued liability represents the value of benefits attributed to prior years of service by the actuarial cost method. A summary of the actuarial accrued liability by decrement is shown below for the current and prior year.

	December 31, 2010			December 31, 2009		
	General Service	Police & Fire	Total	General Service	Police & Fire	Total
Active Members						
Pre-retirement Duty Disability	\$ 2.2	\$ 1.5	\$ 3.7	\$ 1.8	\$ 1.2	\$ 3.0
Pre-retirement Non-Duty Disability	18.9	2.2	21.1	14.2	1.6	15.8
Service Retirement	522.1	84.2	606.3	370.7	58.6	429.2
Vested Benefits	79.8	9.0	88.7	52.5	6.3	58.7
Death	7.9	0.8	8.7	5.4	0.6	6.0
Duty Disability Retirement	0.9	0.7	1.6	0.9	0.7	1.6
Non-Duty Disability Retirement	9.6	1.2	10.7	8.8	1.1	9.9
Total Active Members	\$ 641.4	\$ 99.5	\$ 740.9	\$ 454.2	\$ 70.0	\$ 524.2
Dormant Members			\$ 21.1			\$ 9.8
Retired Members and Beneficiaries			\$ 5.7			\$ 1.5
Total Actuarial Accrued Liability			\$ 767.6			\$ 535.5

Amounts in millions

The change in actuarial accrued liability since the last valuation reflects the experience of the system. The table below reconciles the actuarial accrued liability from the last valuation to this valuation. The actuarial accrued liability is expected to increase due to benefits earned during the year and interest, and to decrease due to benefits paid during the year.

	OPSRP
Actuarial Accrued Liability December 31, 2009	\$ 535.5
Expected change	199.2
Assumption changes	(17.9)
Plan changes	-
New entrants	43.4
Deviations from expected experience	
Retirements from active status	1.5
Active mortality and withdrawal	(8.7)
Pay increases	18.2
Other	(3.6)
Total demographic (gains) and losses	7.4
Actuarial Accrued Liability December 31, 2010	\$ 767.6

Amounts in millions

Pension Plan Valuation

OPSRP Valuation

OPSRP Unfunded Accrued Liability (UAL)

Calculation of UAL

The Unfunded Accrued Liability (UAL) represents the difference between the actuarial accrued liability and the valuation assets. The UAL is amortized over combined valuation payroll. The table below shows the OPSRP UAL, funded status, and UAL as a percentage of combined valuation payroll.

	December 31, 2010		December 31, 2009	
1. Actuarial accrued liability	\$	767.6	\$	535.5
2. Actuarial value of assets	\$	659.0	\$	445.4
3. Unfunded accrued liability	\$	108.6	\$	90.1
4. Funded percentage (2. ÷ 1.)		86%		83%
5. Combined valuation payroll	\$	8,750.1	\$	8,512.2
6. Unfunded accrued liability as % of combined valuation payroll		1%		1%

Amounts in millions

Reconciliation of UAL Bases

Beginning with the December 31, 2007, actuarial valuation, each odd-year valuation establishes a 16-year closed-period amortization base for outstanding OPSRP UAL amounts. For odd-year valuations subsequent to December 31, 2007, this amortization base will be calculated based on the total OPSRP UAL as of that valuation date less the remaining unamortized balance of any OPSRP UAL bases established at previous odd-year valuation dates. In other words, OPSRP experience from December 31, 2009 to December 31, 2011 will be amortized on a 20-year basis in the December 31, 2011 valuation. This even-year advisory valuation shows both the progress of the amortization bases established in prior valuations and an estimate of the base to be established on December 31, 2011, with the estimate based on experience during 2010.

Amortization Base	UAL, December 31, 2009		Payment	Interest	UAL, December 31, 2010		Next Year's Payment	
December 31, 2007	\$	(70.4)	\$	(6.7)	\$	(5.3)	\$	(6.9)
December 31, 2009		160.5		13.8		12.2		14.3
December 31, 2010		N/A		N/A		18.8		1.6
Total	\$	90.1	\$	7.1	\$	6.9	\$	9.0

Amounts in millions

Pension Plan Valuation

OPSRP Valuation

OPSRP Unfunded Accrued Liability (UAL)

Actuarial Gain or Loss since Prior Valuation

In every actuarial valuation, assumptions are made as to the future experience of the plan and covered group of participants. Whenever there is a difference between the actual experience and that anticipated by the actuarial assumptions, there is a gain or loss to the plan. Gains are the result of experience that is more favorable than anticipated (i.e., serves to reduce the unfunded actuarial liability or increase the surplus), while losses are the result of unfavorable experience. The 2010 liability loss is primarily due to new entrants to the OPSRP program and pay increases greater than anticipated.

The table below develops the actuarial gain or loss for OPSRP for the year ending December 31, 2010.

1. Expected actuarial accrued liability		
a. Actuarial accrued liability at December 31, 2009	\$	535.5
b. Normal cost at December 31, 2009 (excluding administrative expenses)	\$	146.3
c. Benefit payments (excluding administrative expenses) for year ending December 31, 2010	\$	(1.6)
d. Interest	\$	54.5
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	\$	734.7
f. Change in actuarial accrued liability at December 31, 2010, due to assumption changes	\$	(17.9)
g. Change in actuarial accrued liability at December 31, 2010, due to plan changes	\$	0.0
h. Expected actuarial accrued liability at December 31, 2010 (e. + f. + g.)	\$	716.8
2. Actuarial accrued liability at December 31, 2010	\$	767.6
3. Liability gain/(loss) (1.g. - 2)	\$	(50.8)
4. Expected actuarial value of assets		
a. Actuarial value of assets at December 31, 2009	\$	445.4
b. Actual contributions for 2010	\$	146.7
c. Benefit payments and administrative expenses for fiscal year ending December 31, 2010	\$	(7.7)
d. Interest	\$	40.9
e. Expected actuarial value of assets at December 31, 2010 (a. + b. + c. + d. + e.)	\$	625.4
5. Actuarial value of assets as of December 31, 2010	\$	659.0
6. Asset gain/(loss) (5. - 4.e.)	\$	33.6
7. Net actuarial gain/(loss) (3. + 6.)	\$	(17.2)

Amounts in millions

Pension Plan Valuation

OPSRP Valuation

OPSRP Unfunded Accrued Liability (UAL)

Reconciliation of the UAL

The table below summarizes the changes in UAL since the prior valuation.

	OPSRP
UAL, December 31, 2009	\$ 90.1
Normal Cost (including actual administrative expenses)	152.4
Contributions	(146.7)
Liability (gain) or loss	50.8
Asset (gain) or loss	(33.6)
Assumption changes	(17.9)
Plan changes	0.0
Interest @ 8.0%	13.5
UAL, December 31, 2010	\$ 108.6

Amounts in millions

Pension Plan Valuation

OPSRP Valuation

OPSRP Contribution Rate Development

Normal Cost Rates

The table below shows the development of the OPSRP normal cost rates.

Development of Normal Cost Rate	December 31, 2010			December 31, 2009		
	General Service	Police & Fire	Average Rate	General Service	Police & Fire	Average Rate
Normal Cost						
Pre-retirement Disability Benefits	\$ 4.9	\$ 0.9	\$ 5.8	\$ 4.4	\$ 0.8	\$ 5.2
All Other Benefits	143.8	23.0	166.8	121.7	19.4	141.1
Assumed Administrative Expenses	5.9	0.7	6.6	5.9	0.7	6.6
Total Normal Cost	\$ 154.7	\$ 24.5	\$ 179.2	\$ 132.0	\$ 20.9	\$ 152.9
OPSRP Valuation Payroll	\$ 2,541.9	\$ 277.8	\$ 2,819.8	\$ 2,153.0	\$ 235.8	\$ 2,388.8
Normal Cost Rate						
Pre-retirement Disability Benefits	0.19%	0.32%	0.20%	0.21%	0.34%	0.22%
All Other Benefits	5.66%	8.26%	5.91%	5.65%	8.23%	5.91%
Assumed Administrative Expenses	0.23%	0.23%	0.23%	0.28%	0.28%	0.28%
Total Normal Cost	6.08%	8.82%	6.35%	6.13%	8.84%	6.40%

Amounts in millions

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, 2010	December 31, 2009
1. Total UAL	\$ 108.6	\$ 90.1
2. Next year's UAL payment	\$ 9.0	\$ 7.1
3. Combined valuation payroll	\$ 8,750.1	\$ 8,512.2
4. UAL rate (2 ÷ 3)	0.10%	0.08%

Amounts in millions

Pension Plan Valuation

OPSRP Valuation

OPSRP Contribution Rate Development

Calculated Employer Contribution Rates (Pre-Rate Collar)

The following table summarizes the OPSRP contribution rate for general service and police & fire members as of the valuation date prior to application of the collar.

The normal cost rates apply to OPSRP payroll only, but the UAL rate is applied to combined valuation payroll. These rates, after the application of the collar, are combined with each employer's Tier 1/Tier 2 rates (other than Tier 1/Tier 2 normal cost rate) to determine each employer's contribution rate on OPSRP payroll.

	Advisory July 1, 2013 Rates		
	Calculated as of December 31, 2010		
	General Service	Police & Fire	Average Rate
OPSRP pension contribution rates			
Employer normal cost rate	6.08%	8.82%	6.35%
Employer UAL rate	0.10%	0.10%	0.10%
Total OPSRP pension rate	6.18%	8.92%	6.45%

Pension Plan Valuation

OPSRP Valuation

OPSRP Contribution Rate Development

Calculation of Rate Collar

The rate collar restricts the average OPSRP contribution rate so it generally cannot change by more than the greater of 3 percentage points or 20 percent of the current average OPSRP contribution rate. However, if the funded percentage is below 70 percent or above 130 percent, the size of the collar is doubled. If the funded percentage is between 70% and 80% or between 120% and 130%, the size of the rate collar is increased on a graded scale. All collar calculations are performed based on the weighted average OPSRP contribution rate, and any adjustment due to the collar is applied to the OPSRP UAL rate.

The table below shows the calculation of and any adjustment for the rate collar.

	Advisory July 1, 2013 Rates		
	Calculated as of December 31, 2010		
	General Service	Police & Fire	Average Rate
1. Current employer contribution rate	6.21%	8.92%	6.48%
2. Size of rate collar			
a. Preliminary size of rate collar (Maximum of 3% or 20% of 1.)			3.00%
b. Funded percentage			85.8%
c. Size of rate collar (If b. < 70% or b. > 130%, 2 x a.. If b. is 80% - 120%, a., otherwise a graded rate between a. and b..)			3.00%
3. July 1, 2013 Minimum contribution rate (1. - 2.c.)			3.48%
4. July 1, 2013 Maximum contribution rate (1. + 2.c.)			9.48%
5. Advisory July 1, 2013 employer contribution rate before collar	6.18%	8.92%	6.45%
6. Advisory July 1, 2013 employer contribution rate after collar	6.18%	8.92%	6.45%
7. Impact of collar (6. - 5.)	0.00%	0.00%	0.00%

Calculated Employer Contribution Rates (Post-Rate Collar)

The table below summarizes the employer’s pension contribution rate for OPSRP after adjustments for the rate collar.

	Advisory July 1, 2013 Rates Calculated as of		
	December 31, 2010		
	General Service	Police & Fire	Average Rate
OPSRP pension contribution rates			
Employer normal cost rate	6.08%	8.82%	6.35%
Employer UAL rate	0.10%	0.10%	0.10%
Total OPSRP pension rate	6.18%	8.92%	6.45%

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Retiree Healthcare Valuation

Retiree Healthcare Assets

Assets

A reconciliation of retiree healthcare assets is shown below. The reconciliation of assets is provided by PERS.

	RHIA	RHIPA	Retiree Healthcare Totals
Additions			
1. Employer contributions	\$ 22.2	\$ 1.5	\$ 23.6
2. Net investment income	\$ 26.1	\$ 0.7	\$ 26.7
3. Other	\$ -	\$ -	\$ -
4. Total additions	\$ 48.2	\$ 2.1	\$ 50.3
Deductions			
4. Healthcare Premium Subsidies	\$ (29.1)	\$ (2.7)	(31.7)
5. Administrative expenses	\$ (1.0)	\$ (0.1)	(1.1)
6. Total deductions	\$ (30.0)	\$ (2.8)	(32.8)
7. Net change	\$ 18.2	\$ (0.7)	17.5
8. Net assets held in trust for benefits			
a. Beginning of year	\$ 214.1	\$ 6.4	220.5
b. End of year	\$ 232.3	\$ 5.7	238.0

Amounts in millions.

Retiree Healthcare Valuation

Retiree Healthcare Liabilities

Normal Cost

A summary of the normal cost by decrement is shown below for the retiree healthcare benefits.

	RHIA			RHIPA		
	12/31/2010	12/31/2009	Percent Change	12/31/2010	12/31/2009	Percent Change
Normal Cost						
Service Retirement	\$ 5.4	\$ 4.9	9.3%	\$ 1.1	\$ 0.7	43.8%
Vested Benefits	0.4	0.4	7.2%	0.0	0.0	0.0%
Duty Disability	0.0	0.0	(1.6%)	0.0	0.0	52.9%
Nonduty Disability	0.0	0.0	(12.0%)	0.1	0.0	40.4%
Death	0.1	0.1	13.7%	0.0	0.0	57.2%
Total Normal Cost	\$ 6.0	\$ 5.5	9.1%	\$ 1.2	\$ 0.8	44.0%

Amounts in millions

The table below reconciles the normal cost from the prior valuation to the current valuation.

	RHIA	RHIPA
Normal Cost December 31, 2009	\$5.5	\$0.8
Expected increase	-	-
Assumption changes	0.8	0.3
Plan changes	-	-
Deviations from expected experience		
Demographic (gains) or losses	(0.3)	0.0
Normal Cost December 31, 2010	\$6.0	\$1.2

Amounts in millions

Retiree Healthcare Valuation

Retiree Healthcare Liabilities

Actuarial Accrued Liability

A summary of the actuarial accrued liability by decrement is shown below for the retiree healthcare benefits.

	RHIA			RHIPA		
	12/31/2010	12/31/2009	Percent Change	12/31/2010	12/31/2009	Percent Change
Active						
Service Retirement	\$ 95.6	\$ 82.2	16.2%	\$ 20.7	\$ 14.0	48.6%
Vested Benefits	6.5	5.6	15.1%	0.0	0.0	0.0%
Duty Disability	0.1	0.1	5.6%	0.1	0.1	63.2%
Nonduty Disability	0.6	0.6	(6.8%)	0.9	0.6	47.0%
Death	1.8	1.5	23.1%	0.4	0.2	66.4%
Total Actives	\$ 104.5	\$ 90.0	16.1%	\$ 22.2	\$ 14.9	48.9%
Dormant Members	27.6	20.8	32.2%	0.0	0.0	0.0%
Retired Members and Beneficiaries	415.0	400.3	3.7%	11.8	9.7	21.7%
Total Actuarial Accrued Liability	\$ 547.1	\$ 511.2	7.0%	\$ 33.9	\$ 24.5	38.2%

Amounts in millions

The change in actuarial accrued liability since the last valuation reflects the experience of the system. The table below reconciles the actuarial accrued liability from the last valuation to this valuation. The actuarial accrued liability is expected to increase due to benefits earned during the year and interest, and to decrease due to benefits paid during the year.

	RHIA	RHIPA	Total
Actuarial Accrued Liability December 31, 2009	\$ 511.2	\$ 24.5	\$ 535.7
Expected Change	16.6	0.1	16.7
Assumption Changes	20.1	6.1	26.2
Plan changes	-	-	-
Deviations from expected experience			
Demographic (gains) or losses	(0.8)	3.2	2.5
Actuarial Accrued Liability December 31, 2010	\$ 547.1	\$ 33.9	\$ 581.1

Amounts in millions

Retiree Healthcare Valuation

Retiree Healthcare Unfunded Accrued Liability (UAL)

Calculation of UAL

The Unfunded Accrued Liability (UAL) represents the difference between the actuarial accrued Liability and the valuation assets. A summary of the UAL by program is shown on the following table.

	RHIA			RHIPA		
	12/31/2010	12/31/2009	Percent Change	12/31/2010	12/31/2009	Percent Change
1. Actuarial accrued liability	\$ 547.1	\$ 511.2	7.0%	\$ 33.9	\$ 24.5	38.2%
2. Actuarial value of assets	\$ 232.3	\$ 214.1	8.5%	\$ 5.7	\$ 6.4	(10.3%)
3. Unfunded accrued liability	\$ 314.8	\$ 297.1	6.0%	\$ 28.2	\$ 18.2	55.1%
4. Funded percentage (2. ÷ 1.)	42.5%	41.9%	1.4%	16.8%	25.9%	(35.1%)
5. Combined valuation payroll	\$ 8,750.1	\$ 8,512.2	2.8%	\$ 2,379.7	\$ 2,371.8	0.3%
6. Unfunded accrued liability as % of combined valuation payroll (3. ÷ 5.)	3.6%	3.5%	3.1%	1.2%	0.8%	54.6%

Amounts in millions

Reconciliation of UAL Bases

Beginning with the December 31, 2007 actuarial valuation, each rate-setting valuation establishes an amortization base for outstanding RHIA and RHIPA UAL amounts. For odd-year valuations subsequent to December 31, 2007, this amortization base will be calculated based on the total UAL as of that valuation date less the remaining unamortized balance of any UAL bases established at previous odd-year valuation dates. In other words, RHIA and RHIPA experience from December 31, 2009 to December 31, 2011 will be amortized on a 10-year basis in the December 31, 2011 valuation. This even-year advisory valuation shows both the progress of the amortization bases established in prior valuations and an estimate of the base to be established on December 31, 2011, with the estimate based on experience during 2010.

RHIA

Amortization Base	UAL, December 31, 2009	Payment	Interest	UAL, December 31, 2010	Next Year's Payment
December 31, 2007	\$ 234.5	\$ 34.8	\$ 17.3	\$ 217.0	\$ 36.1
December 31, 2009	62.6	7.7	4.7	59.5	8.0
December 31, 2010	N/A	N/A	N/A	38.3	4.7
Total	\$ 297.1	\$ 42.5	\$ 22.0	\$ 314.8	\$ 48.8

RHIPA

Amortization Base	UAL, December 31, 2009	Payment	Interest	UAL, December 31, 2010	Next Year's Payment
December 31, 2007	\$ 16.1	\$ 2.4	\$ 1.2	\$ 14.9	\$ 2.5
December 31, 2009	2.1	0.3	0.2	2.0	0.3
December 31, 2010	N/A	N/A	N/A	11.3	1.4
Total	\$ 18.2	\$ 2.6	\$ 1.3	\$ 28.2	\$ 4.1

Amounts in millions

Retiree Healthcare Valuation

Retiree Healthcare Unfunded Accrued Liability (UAL)

Reconciliation of UAL Bases

Actuarial Gain or Loss since Prior Valuation

In every actuarial valuation, assumptions are made as to the future experience of the plan and covered group of participants. Whenever there is a difference between the actual experience and that anticipated by the actuarial assumptions, there is a gain or loss to the plan. Gains are the result of experience that is more favorable than anticipated (i.e., serves to reduce the unfunded actuarial liability or increase the surplus), while losses are the result of unfavorable experience.

The table below shows the development of the actuarial gain (or loss) for RHIA and RHIPA for the plan year ending December 31, 2010.

	RHIA	RHIPA	Retiree Healthcare Totals
Retiree Healthcare			
1. Expected actuarial accrued liability			
a. Actuarial accrued liability at December 31, 2009	\$ 511.2	\$ 24.5	\$ 535.7
b. Normal cost at December 31, 2009	\$ 5.5	\$ 0.8	\$ 6.3
c. Benefit payments for fiscal year ending December 31, 2010	\$ (29.1)	\$ (2.7)	\$ (31.7)
d. Interest	\$ 40.2	\$ 1.9	\$ 42.1
e. Expected actuarial accrued liability before changes (a. + b. + c. + d.)	\$ 527.8	\$ 24.6	\$ 552.4
f. Change in actuarial accrued liability at December 31, 2010, due to assumption changes	\$ 20.1	\$ 6.1	\$ 26.2
g. Change in actuarial accrued liability at December 31, 2010, due to plan changes	\$ -	\$ -	\$ -
h. Expected actuarial accrued liability at December 31, 2010 (e. + f. + g.)	\$ 547.9	\$ 30.7	\$ 578.6
2. Actuarial accrued liability at December 31, 2010	\$ 547.1	\$ 33.9	\$ 581.1
3. Liability gain/(loss) (1.h. - 2)	\$ 0.8	\$ (3.2)	\$ (2.5)
4. Expected actuarial value of assets			
a. Actuarial value of assets at December 31, 2009	\$ 214.1	\$ 6.4	\$ 220.5
b. Actual contributions for 2010	\$ 22.2	\$ 1.5	\$ 23.6
c. Benefit payments and expenses for fiscal year ending December 31, 2010	\$ (30.0)	\$ (2.8)	\$ (32.8)
d. Interest	\$ 16.8	\$ 0.5	\$ 17.3
e. Expected actuarial value of assets before changes (a. + b. + c. + d.)	\$ 223.1	\$ 5.5	\$ 228.6
f. Change in actuarial value of assets at December 31, 2010, due to assumption changes	\$ -	\$ -	\$ -
g. Change in actuarial value of assets at December 31, 2010, due to plan changes	\$ -	\$ -	\$ -
h. Expected actuarial value of assets at December 31, 2010 (e. + f. + g.)	\$ 223.1	\$ 5.5	\$ 228.6
5. Actuarial value of assets at December 31, 2010	\$ 232.3	\$ 5.7	\$ 238.0
6. Actuarial asset gain/(loss) (5. - 4.h.)	\$ 9.3	\$ 0.2	\$ 9.5
7. Net actuarial gain/(loss) (3. + 6.)	\$ 10.0	\$ (3.0)	\$ 7.0
<i>Amounts in millions</i>			

Retiree Healthcare Valuation

Retiree Healthcare Unfunded Accrued Liability (UAL)

Reconciliation of UAL

The table below summarizes the changes in UAL since the prior valuation.

		RHIA		RHIPA
UAL, December 31, 2009	\$	297.1	\$	18.2
Normal Cost (including actual administrative expenses)		6.5		0.9
Contributions		(22.2)		(1.5)
Liability (gain) or loss		(0.8)		3.2
Asset (gain) or loss		(9.3)		(0.2)
Assumption changes		20.1		6.1
Interest @ 8.0%		23.4		1.5
UAL, December 31, 2010	\$	314.8	\$	28.2
<i>Amounts in millions</i>				

Retiree Healthcare Valuation

Retiree Healthcare Contribution Rate Development

Normal Cost Rate

The table below shows the development of the retiree healthcare normal cost rates. For RHIA, valuation payroll is shown on a system-wide basis. For RHIPA, valuation payroll is for the State of Oregon and the State Judiciary only.

	RHIA		RHIPA	
	December 31, 2010	December 31, 2009	December 31, 2010	December 31, 2009
Normal Cost	\$ 6.0	\$ 5.5	\$ 1.2	\$ 0.8
Tier 1/Tier 2 Valuation Payroll	\$ 5,930.3	\$ 6,123.4	\$ 1,603.3	\$ 1,705.1
Normal Cost Rate	0.10%	0.09%	0.07%	0.05%

Amounts in millions

The table below shows the development of the retiree healthcare normal cost rates for the various rate pools. For RHIA, valuation payroll is shown on a system-wide basis. For RHIPA, valuation payroll is for the State of Oregon and the State Judiciary only. For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	December 31, 2010			
	SLGRP	School Districts	Independent Employers	Retiree Healthcare Total
Tier 1/ Tier 2 Valuation Payroll				
a. Tier 1/Tier 2	\$ 3,333.1	\$ 2,027.5	\$ 569.7	\$ 5,930.3
b. State Only Payroll	\$ 1,586.8	\$ 0.0	\$ 16.5	\$ 1,603.3
Normal Cost Rate				
a. RHIA	0.10%	0.10%	0.10%	0.10%
b. RHIPA	0.07%	0.00%	0.07%	0.07%
Weighted Average Normal Cost Rate	0.13%	0.10%	0.10%	0.12%

Amounts in millions

Retiree Healthcare Valuation

Retiree Healthcare Contribution Rate Development

UAL Rate

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

	RHIA		RHIPA	
	December 31, 2010	December 31, 2009	December 31, 2010	December 31, 2009
1. Total UAL, December 31, 2010	314.8	297.1	28.2	18.2
2. Next year's UAL payment	48.8	42.5	4.1	2.6
3. Combined valuation payroll	\$ 8,750.1	\$ 8,512.2	\$ 2,379.7	\$ 2,371.8
4. UAL rate (2 ÷ 3)	0.56%	0.50%	0.17%	0.11%

Amounts in millions

The table below shows the development of the retiree healthcare UAL rates for the various rate pools. For RHIA, combined valuation payroll is shown on a system-wide basis. For RHIPA, valuation payroll is for the State of Oregon and the State Judiciary only. For this exhibit, all independent employers, including State Judiciary, have been grouped together.

	December 31, 2010			
	SLGRP	School Districts	Independent Employers	Retiree Healthcare Total
1. Combined Valuation Payroll				
a. Tier 1/Tier 2	\$ 4,973.4	\$ 2,950.7	\$ 826.0	\$ 8,750.1
b. State Only Payroll	\$ 2,363.3	\$ 0	\$ 16.5	\$ 2,379.7
2. UAL Rate				
a. RHIA - Reg	0.56%	0.56%	0.56%	0.56%
b. RHIPA - Reg	0.17%	0.00%	0.17%	0.17%
3. Weighted Average UAL Rate [(1.a. x 2.a + 1.b. x 2.b.) / 1.a]	0.64%	0.56%	0.56%	0.61%

Amounts in millions

Retiree Healthcare Valuation

Retiree Healthcare Contribution Rate Development

Calculated Employer Contribution Rate Summary

The following table summarizes the calculated employer contribution rates for the retiree healthcare programs. The normal cost rates are applied against Tier 1/Tier 2 payroll, but the UAL rates are applied against all payroll.

	Advisory July 1, 2013 Rates Calculated as of December 31, 2010		
	State Agencies and Judiciary	All Other Employers	Retiree Healthcare Total
Normal Cost Rates			
RHIA	0.10%	0.10%	0.10%
RHIPA	0.07%	0.00%	0.02%
Total normal cost rate	0.17%	0.10%	0.12%
UAL Rates			
RHIA	0.56%	0.56%	0.56%
RHIPA	0.17%	0.00%	0.05%
Total UAL rate	0.73%	0.56%	0.61%
Total retiree healthcare rate	0.90%	0.66%	0.73%

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Accounting/CAFR Exhibits

The following information as of December 31, 2010, has been prepared and provided to Oregon PERS for inclusion in the Actuarial Section of the 2011 Comprehensive Annual Financial Report (CAFR):

- Schedule of Active Member Valuation Data
- Schedule of Retirees and Beneficiaries Added to and Removed from Rolls
- Schedules of Funding Progress by Rate Pool
- Solvency Test
- Analysis of Financial Experience

In addition, the Schedules of Funding Progress, the Schedules of Employer Contributions and the Notes to Required Supplementary Schedules are provided for the Financial Section of the CAFR. Amounts shown for the December 31, 2003 actuarial valuation and earlier are the amounts reported by the prior actuary for those valuations. All data and amounts shown for the December 31, 2005 and later actuarial valuations include both Tier 1/Tier 2 and OPSRP member and employer counts, assets, and liabilities.

Some employers have made supplemental deposits in addition to their regularly scheduled contributions. These deposits are placed in a side account within the pension trust and used to offset future contribution requirements of that employer. For financial reporting purposes, supplemental deposits are not considered as contributions toward meeting the Annual Required Contribution (ARC) or the contractually required contribution for employers in a cost-sharing pool. The Schedule of Funding Progress and Solvency Test also include side accounts as part of the Plan's assets.

Mercer prepared the Schedule of Employer Contributions exhibit for 2006 and subsequent years. Our understanding is that prior schedules were prepared by Oregon PERS. Due to the phase-in of the significant contribution rate increases calculated in the December 31, 2003 valuation, the schedule indicates that only a portion of the pension annual required contribution (ARC) was contributed in 2006 and 2007. Effective July 1, 2007, contribution rates were implemented to return pension contributions for the system to the full ARC. During the July 2011 to June 2013 biennium, the percentage of the ARC contribution will be less than 100 percent due to the application of the contribution rate stabilization method (rate collar).

Mercer is not an accounting or audit firm and cannot provide accounting advice. Mercer 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 Oregon PERS in completing its financial statements, but any accounting determination should be reviewed by your auditor.

The exhibits are provided on the following pages.

Accounting/CAFR Exhibits

Actuarial Schedules

Schedule of Active Member Valuation Data

Valuation Date	Count	Annual Payroll (in Thousands)	Average Annual Pay	% Increase in Average Pay	Number of Participating Employers ¹	
12/31/1993	137,513	\$ 4,466,797	\$ 32,483	4.9%	N/A	
12/31/1995	141,471	\$ 4,848,058	\$ 34,269	2.7%	N/A	
12/31/1997	143,194	\$ 5,161,562	\$ 36,045	2.6%	N/A	
12/31/1999	151,262	\$ 5,676,606	\$ 37,528	2.0%	N/A	
12/31/2000	156,869	\$ 6,195,862	\$ 39,497	5.2%	N/A	
12/31/2001	160,477	\$ 6,520,225	\$ 40,630	2.9%	N/A	Old Basis
12/31/2001	160,477	\$ 6,253,965	\$ 38,971	—	N/A	New Basis ²
12/31/2002	159,287	\$ 6,383,475	\$ 40,075	2.8%	N/A	
12/31/2003	153,723	\$ 6,248,550	\$ 40,648	1.4%	N/A	
12/31/2004	142,635	\$ 6,306,447	\$ 44,214	8.8%	806	
12/31/2005 ³	156,501	\$ 6,791,891	\$ 43,398	-1.8%	810	
12/31/2006	163,261	\$ 7,326,798	\$ 44,878	3.4%	758	
12/31/2007	167,023	\$ 7,721,819	\$ 46,232	3.0%	760	
12/31/2008	170,569	\$ 8,130,136	\$ 47,665	3.1%	766	
12/31/2009	178,606	\$ 8,512,192	\$ 47,659	0.0%	776	
12/31/2010	193,569	\$ 8,750,064	\$ 45,204	-5.2%	787	

¹ Effective in 2006, participating employers are defined for this purpose as any employer with covered payroll during the prior year. In prior years, employers with liabilities but without covered payroll were included as well.

² Effective in 2001, the Annual Payroll excludes the member pick-up, if any.

³ Effective with the 12/31/2005 valuation, OPSRP members and payroll are included.

Accounting/CAFR Exhibits

Actuarial Schedules

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Annual Allowances are shown in thousands.

Valuation Date	Added to Rolls		Removed from Rolls		Rolls - End of Year		% Increase in Annual Allowances ¹	Average Annual Allowances
	Count	Annual Allowances	Count	Annual Allowances	Count	Annual Allowances		
12/31/1993					60,841	\$ 564,341	27.6%	\$ 9,276
12/31/1995					64,796	\$ 700,171	24.1%	\$ 10,806
12/31/1997					69,624	\$ 919,038	31.3%	\$ 13,200
12/31/1999					82,819	\$ 1,299,380	41.4%	\$ 15,689
12/31/2000					82,458	\$ 1,385,556	6.6%	\$ 16,803
12/31/2001					85,216	\$ 1,514,491	9.3%	\$ 17,772
12/31/2002					89,482	\$ 1,722,865	13.8%	\$ 19,254
12/31/2003					97,777	\$ 2,040,533	8.4%	\$ 20,869
12/31/2004 ²	6,754	\$ 149,474	2,863	\$ 35,151	101,668	\$ 2,154,856	5.6%	\$ 21,195
12/31/2005 ²	4,472	\$ 149,127	3,217	\$ 36,784	102,923	\$ 2,267,198	5.2%	\$ 22,028
12/31/2006 ^{2,3}	5,060	\$ 151,240	3,263	\$ 39,735	104,720	\$ 2,378,704	4.9%	\$ 22,715
12/31/2007 ^{2,3}	5,385	\$ 183,232	3,304	\$ 40,590	106,801	\$ 2,521,345	6.0%	\$ 23,608
12/31/2008 ^{2,3}	5,963	\$ 171,484	3,626	\$ 47,062	109,138	\$ 2,645,767	4.9%	\$ 24,242
12/31/2009 ^{2,3}	6,377	\$ 226,713	3,374	\$ 46,228	112,141	\$ 2,826,252	6.8%	\$ 25,203
12/31/2010 ^{2,3}	6,359	\$ 217,424	3,512	\$ 51,627	114,988	\$ 2,992,048	5.9%	\$ 26,021

¹ Since last valuation date.

² Annual allowances reflect estimated adjustments to retiree benefits due to the implementation of the *Strunk v. PERB, et al.* and *City of Eugene v. State of Oregon, PERB, et al.* decisions.

³ Annual allowances do not reflect adjustments due to any interpretation of Judge Kantor's June 20, 2007 ruling in the *Arken and Robinson* cases.

Accounting/CAFR Exhibits

GASB Nos. 25 and 43 Information

Schedule of Funding Progress by Rate Pool

The GASB Statement Nos. 25 and 43 liabilities and assets resulting from the last six actuarial valuations are as follows (dollar amounts in millions):

Actuarial Valuation Date	Actuarial Value of Assets ^{1,2} (a)	Actuarial Accrued Liability (AAL) ² (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll ³ (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Tier 1/Tier 2 State & Local Government Rate Pool						
12/31/2005 ⁴	\$ 25,556.3	\$ 24,450.3	\$ (1,106.0)	104.5%	\$ 3,089.8	(35.8%)
12/31/2006	\$ 28,177.2	\$ 25,390.0	\$ (2,787.3)	111.0%	\$ 3,174.6	(87.8%)
12/31/2007 ⁵	\$ 30,314.8	\$ 26,883.1	\$ (3,431.7)	112.8%	\$ 3,448.1	(99.5%)
12/31/2008	\$ 22,301.2	\$ 27,551.8	\$ 5,250.6	80.9%	\$ 3,452.7	152.1%
12/31/2009 ⁶	\$ 25,068.8	\$ 29,029.1	\$ 3,960.3	86.4%	\$ 3,465.1	114.3%
12/31/2010	\$ 26,499.5	\$ 30,285.0	\$ 3,785.4	87.5%	\$ 3,333.1	113.6%
Tier 1/Tier 2 School District Rate Pool						
12/31/2005	\$ 21,095.0	\$ 20,151.8	\$ (943.2)	104.7%	\$ 2,126.5	(44.4%)
12/31/2006	\$ 23,033.4	\$ 20,825.0	\$ (2,208.4)	110.6%	\$ 2,233.7	(98.9%)
12/31/2007	\$ 24,053.6	\$ 21,299.3	\$ (2,754.3)	112.9%	\$ 2,185.0	(126.1%)
12/31/2008	\$ 17,458.5	\$ 21,742.7	\$ 4,284.2	80.3%	\$ 2,153.7	198.9%
12/31/2009	\$ 19,388.0	\$ 22,517.6	\$ 3,129.6	86.1%	\$ 2,079.2	150.5%
12/31/2010	\$ 20,343.5	\$ 23,303.3	\$ 2,959.8	87.3%	\$ 2,027.5	146.0%
Tier 1/Tier 2 Independent Employers and Judiciary						
12/31/2005 ⁴	\$ 4,742.9	\$ 4,575.0	\$ (167.9)	103.7%	\$ 894.9	(18.8%)
12/31/2006	\$ 5,330.5	\$ 4,860.1	\$ (470.4)	109.7%	\$ 928.1	(50.7%)
12/31/2007 ⁵	\$ 4,765.5	\$ 4,423.2	\$ (342.3)	107.7%	\$ 628.8	(54.4%)
12/31/2008	\$ 3,576.7	\$ 4,566.0	\$ 989.3	78.3%	\$ 619.4	159.7%
12/31/2009 ⁶	\$ 3,926.7	\$ 4,665.9	\$ 739.3	84.2%	\$ 579.1	127.7%
12/31/2010	\$ 4,189.4	\$ 4,913.1	\$ 723.7	85.3%	\$ 569.7	127.0%
OPSRP Rate Pool						
12/31/2005	\$ 55.0	\$ 53.8	\$ (1.2)	102.3%	\$ 680.7	(0.2%)
12/31/2006	\$ 151.4	\$ 115.0	\$ (36.4)	131.6%	\$ 990.4	(3.7%)
12/31/2007	\$ 275.1	\$ 203.0	\$ (72.1)	135.5%	\$ 1,459.9	(4.9%)
12/31/2008	\$ 270.5	\$ 336.8	\$ 66.3	80.3%	\$ 1,904.3	3.5%
12/31/2009	\$ 445.4	\$ 535.5	\$ 90.1	83.2%	\$ 2,388.8	3.8%
12/31/2010	\$ 659.0	\$ 767.6	\$ 108.6	85.8%	\$ 2,819.8	3.9%
Postemployment Healthcare Benefits - Retirement Health Insurance Account						
12/31/2005	\$ 181.0	\$ 495.9	\$ 314.9	36.5%	\$ 6,111.2	5.2%
12/31/2006	\$ 221.3	\$ 511.8	\$ 290.5	43.2%	\$ 6,336.4	4.6%
12/31/2007	\$ 250.8	\$ 499.6	\$ 248.8	50.2%	\$ 6,261.9	4.0%
12/31/2008	\$ 183.8	\$ 494.0	\$ 310.2	37.2%	\$ 6,225.8	5.0%
12/31/2009	\$ 214.1	\$ 511.2	\$ 297.1	41.9%	\$ 6,123.4	4.9%
12/31/2010	\$ 232.3	\$ 547.1	\$ 314.8	42.5%	\$ 5,930.3	5.3%
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account						
12/31/2005	\$ 6.1	\$ 27.0	\$ 20.9	22.7%	\$ 1,621.2	1.3%
12/31/2006	\$ 7.0	\$ 23.4	\$ 16.4	30.0%	\$ 1,665.7	1.0%
12/31/2007	\$ 7.8	\$ 23.3	\$ 15.5	33.6%	\$ 1,692.1	0.9%
12/31/2008	\$ 5.7	\$ 21.3	\$ 15.6	26.7%	\$ 1,708.5	0.9%
12/31/2009	\$ 6.4	\$ 24.5	\$ 18.2	25.9%	\$ 1,705.1	1.1%
12/31/2010	\$ 5.7	\$ 33.9	\$ 28.2	16.8%	\$ 1,603.3	1.8%

Notes:

- ¹ Side account assets are included with Tier 1/Tier 2 assets.
- ² Excludes effect of Multnomah Fire District (net UAAL of \$168 million as of 12/31/2010).
- ³ Covered payroll shown is payroll for members of the rate pool benefiting from the specified program. For example, Tier 1/Tier 2 School District payroll is only payroll for Tier 1/Tier 2 members and excludes OPSRP. However, UAAL is amortized using combined Tier 1/Tier 2 and OPSRP payroll.
- ⁴ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2006.
- ⁵ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2008.
- ⁶ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2010.

Accounting/CAFR Exhibits

Solvency Test

Pension and Retiree Healthcare Plans

(dollar amounts in millions)

Valuation Date ²	Actuarial Accrued Liability ¹			Valuation Assets ^{1,3}	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retired			(1)	(2)	(3)
		Members and Beneficiaries	Other Members				
(1)	(2)	(3)					
12/31/1995	\$ 5,753.0	\$ 7,492.8	\$ 10,002.8	\$ 20,957.6	100%	100%	77%
12/31/1997	\$ 8,135.4	\$ 9,994.9	\$ 13,534.6	\$ 29,108.2	100%	100%	81%
12/31/1999	\$ 8,238.1	\$ 14,333.7	\$ 18,336.1	\$ 39,964.8	100%	100%	95%
12/31/2000	\$ 10,142.5	\$ 15,664.1	\$ 17,543.9	\$ 41,804.6	100%	100%	91%
12/31/2001	\$ 10,252.8	\$ 17,465.9	\$ 18,229.0	\$ 39,852.2	100%	100%	67%
12/31/2001 ⁴	\$ 10,252.8	\$ 17,340.0	\$ 10,228.8	\$ 39,852.2	100%	100%	120%
12/31/2002 ⁴	\$ 9,940.7	\$ 19,339.0	\$ 10,240.8	\$ 36,316.8	100%	100%	69%
12/31/2003 ⁴	\$ 9,005.8	\$ 23,625.9	\$ 11,993.9	\$ 42,874.4	100%	100%	85%
12/31/2004 ^{5,6}	\$ 9,073.0	\$ 25,363.0	\$ 13,547.6	\$ 45,735.3	100%	100%	83%
12/31/2005 ^{7,8}	\$ 9,169.7	\$ 26,602.4	\$ 14,044.7	\$ 51,569.6	100%	100%	112%
12/31/2006	\$ 9,410.8	\$ 27,711.3	\$ 14,666.2	\$ 56,844.8	100%	100%	134%
12/31/2007 ⁹	\$ 9,225.0	\$ 29,157.3	\$ 15,011.8	\$ 59,586.4	100%	100%	141%
12/31/2008	\$ 8,341.5	\$ 30,537.7	\$ 15,895.7	\$ 43,710.2	100%	100%	30%
12/31/2009 ¹⁰	\$ 8,392.0	\$ 32,484.2	\$ 16,470.1	\$ 48,949.7	100%	100%	49%
12/31/2010	\$ 8,407.9	\$ 34,432.5	\$ 17,070.2	\$ 51,821.6	100%	100%	53%

¹ Includes effect of Multnomah Fire District (net UAAL of \$168 million as of 12/31/2010).

² An extensive revision of the actuarial assumptions occurs prior to each odd-year valuation; therefore, the figures are not directly comparable. Effective with the 12/31/2006 valuation, revisions to actuarial assumptions occur prior to each even-year valuation.

³ Effective with the 12/31/2002 valuation, includes the value of UAL Lump Sum Side Accounts.

⁴ The 2001 valuation was revised to include the impact of PERS Reform Legislation enacted in 2003. Figures through 12/31/2003 do not reflect the judicial review or subsequent Board action.

⁵ Effective with the 2004 valuation, the Oregon Supreme Court rulings in *Strunk v. PERB*, et al. (Issued March 8, 2005) and *City of Eugene v. State of Oregon*, *PERB*, et al. (Issued August 11, 2005) are reflected.

⁶ Effective with the 2004 valuation, the cost method was changed from Entry Age Normal to Projected Unit Credit, and the actuarial value of assets was changed from a 4-year smoothed value to market value.

⁷ Assets and liabilities for OPSRP are first valued in the 2005 valuation.

⁸ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2006.

⁹ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2008.

¹⁰ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2010.

Accounting/CAFR Exhibits

Actuarial Schedules

Analysis of Financial Experience

*Gains and Losses in Accrued Liability During Year Ended 2010 Resulting from Differences Between Assumed Experience and Actual Experience
(dollar amounts in millions)*

Pension and Retiree Healthcare Plans	\$ Gain (or Loss) for Year	
	2010	2009
<i>Type of Activity</i>		
Retirements from Active Status	\$ (134.0)	\$ (151.0)
Active Mortality and Withdrawal	(37.4)	(33.6)
Pay Increases	121.4	(68.7)
Contributions	26.1	82.1
Interest Crediting Experience	(70.0)	(191.3)
Investment Income	1,455.9	3,588.2
Retirement, Mortality and Lump Sums from Dormant Status	98.1	149.5
Retiree and Beneficiary Mortality	(127.6)	(135.4)
Data Corrections	(5.2)	(12.6)
COLA Experience	29.3	-
Other	(103.5)	(107.7)
Gain (or Loss) During Year From Financial Experience	\$ 1,253.1	\$ 3,119.5
<i>Non-Recurring Items</i>		
Assumption Changes	(243.3)	-
Plan Changes	-	(2.5)
Composite Gain (or Loss) During Year	\$ 1,009.8	\$ 3,117.0

Accounting/CAFR Exhibits

GASB Nos. 25 and 43 Required Supplementary Information

Schedules of Funding Progress

(dollar amounts in millions)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Pension Benefits - Tier 1/Tier 2 and OPSRP¹						
12/31/2000	41,739.6	42,783.9	1,044.3	97.6%	6,195.9	16.9%
12/31/2001	39,772.7	45,386.1	5,613.4	87.6%	6,254.0 ²	89.8%
12/31/2001 ³	39,772.7	37,258.3	(2,514.4)	106.7%	6,254.0	(40.2%)
12/31/2002 ³	35,446.9	38,947.0	3,500.1	91.0%	6,383.5	54.8%
12/31/2003 ³	42,753.3	44,078.1	1,324.8	97.0%	6,248.5	21.2%
12/31/2004 ^{4,5}	45,581.1	47,398.6	1,817.5	96.2%	6,772.4 ⁶	26.8%
12/31/2005 ^{6,7}	51,382.6	49,294.0	(2,088.6)	104.2%	6,791.9	(30.8%)
12/31/2006	56,616.5	51,252.9	(5,363.5)	110.5%	7,326.8	(73.2%)
12/31/2007 ⁸	59,327.8	52,871.2	(6,456.7)	112.2%	7,721.8	(83.6%)
12/31/2008	43,520.6	54,259.5	10,738.9	80.2%	8,130.1	132.1%
12/31/2009 ⁹	48,729.2	56,810.6	8,081.4	85.8%	8,512.2	94.9%
12/31/2010	51,583.5	59,329.5	7,746.0	86.9%	8,750.1	88.5%
Postemployment Healthcare Benefits - Retirement Health Insurance Account						
12/31/2000	62.1	543.5	481.4	11.4%	6,195.9	7.8%
12/31/2001	76.6	532.1	455.5	14.4%	6,254.0 ²	7.3%
12/31/2001 ³	76.6	533.2	456.6	14.4%	6,254.0	7.3%
12/31/2002 ³	87.4	542.3	454.9	16.1%	6,383.5	7.1%
12/31/2003 ³	117.1	522.5	405.4	22.4%	6,248.5	6.5%
12/31/2004 ⁵	148.0	556.9	408.9	26.6%	6,772.4 ⁶	6.0%
12/31/2005	181.0	495.9	314.9	36.5%	6,791.9	4.6%
12/31/2006	221.3	511.8	290.5	43.2%	7,326.8	4.0%
12/31/2007	250.8	499.6	248.8	50.2%	7,721.8	3.2%
12/31/2008	183.8	494.0	310.2	37.2%	8,130.1	3.8%
12/31/2009	214.1	511.2	297.1	41.9%	8,512.2	3.5%
12/31/2010	232.3	547.1	314.8	42.5%	8,750.1	3.6%
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account						
12/31/2000	2.9	23.1	20.2	12.6%	1,984.0	1.0%
12/31/2001	3.0	29.5	26.5	10.2%	1,954.1 ²	1.4%
12/31/2001 ³	2.9	29.6	26.7	9.8%	1,954.1	1.4%
12/31/2002 ³	2.9	30.1	27.2	9.6%	1,741.9	1.6%
12/31/2003 ³	4.0	25.0	21.0	16.0%	1,711.9	1.2%
12/31/2004 ⁵	5.2	28.2	23.0	18.4%	1,851.4 ⁶	1.2%
12/31/2005	6.1	27.0	20.9	22.7%	1,827.0	1.1%
12/31/2006	7.0	23.4	16.4	30.0%	1,946.8	0.8%
12/31/2007	7.8	23.3	15.5	33.6%	2,080.2	0.7%
12/31/2008	5.7	21.3	15.6	26.7%	2,217.9	0.7%
12/31/2009	6.4	24.5	18.2	25.9%	2,371.8	0.8%
12/31/2010	5.7	33.9	28.2	16.8%	2,379.7	1.2%

Notes:

¹ Includes UAAL for Multnomah Fire District (\$168 million as of 12/31/2010)² Effective with the 2001 valuation, Annual Active Member Payroll excludes the member pick-up, if any.³ The 2001 valuation was revised to include the impact of PERS Reform Legislation enacted in 2003. Figures through 12/31/2003 do not reflect the judicial review or subsequent Board action.⁴ Effective with the 2004 valuation, the Oregon Supreme Court rulings in *Strunk v. PERB, et al.* (Issued March 8, 2005) and *City of Eugene v. State of Oregon, PERB, et al.* (Issued August 11, 2005) are reflected.⁵ Effective with the 2004 valuation, the cost method was changed from Entry Age Normal to Projected Unit Credit, and the actuarial value of assets was changed from a 4-year smoothed value to market value.⁶ Assets and liabilities for OPSRP are first valued in the 2005 valuation. OPSRP payroll, however, was included in the amortization of the UAAL beginning with the 2004 valuation.⁷ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2006.⁸ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2008.⁹ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective 1/1/2010.

Accounting/CAFR Exhibits

GASB Nos. 25 and 43 Required Supplementary Information

Schedules of Employer Contributions

(dollar amounts in millions)

Actuarial Valuation Date	Annual Required Contribution ^{1,2}	Percentage Contributed
Pension Benefits - Tier 1/Tier 2 and OPSRP		
12/31/2006	\$938.6	63%
12/31/2007	\$805.7	74%
12/31/2008	\$707.4	100% ³
12/31/2009	\$630.8	100% ³
12/31/2010	\$472.4	100% ³
Postemployment Healthcare Benefits - Retirement Health Insurance Account		
12/31/2006	\$44.3	89%
12/31/2007	\$38.8	91%
12/31/2008	\$33.0	85%
12/31/2009	\$29.8	87%
12/31/2010	\$26.5	83%
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account		
12/31/2006	\$2.5	90%
12/31/2007	\$2.7	79%
12/31/2008	\$2.9	63%
12/31/2009	\$2.6	68%
12/31/2010	\$2.3	64%

¹ The Annual Required Contribution prior to 7/1/2007 is based on the 7/1/2005 rates developed in the 12/31/2003 Milliman valuation prior to the adjustment to phase-in the rate increase and adjusted for supplemental payments since 12/31/2003. For most employers, the actual pension amount contributed from 7/1/2005 to 6/30/2007 was based on the phased-in rates.

² The Annual Required Contribution shown is an estimated amount based on system-wide contribution rates in effect for the year in question and system payroll as reported by PERS. For example, the 2010 pension benefits ARC is based on rates developed in the 12/31/2007 actuarial valuation and 2010 payroll as reported by PERS.

³ For both the July 2007-June 2009 and July 2009-June 2011 biennia, system employers are generally required to contribute 100% of the Annual Required Contribution for Tier 1/Tier 2 and OPSRP, as a percent of pay. The actual dollar amount contributed in a given calendar year can vary from the estimated Annual Required Contribution based on factors such as month-to-month variations in payroll and timing of contributions. During the July 2011-June 2013 biennium, the percentage of ARC contributed will be less than 100% due to the application of the contribution rate stabilization method (rate collar).

Accounting/CAFR Exhibits

GASB Nos. 25 and 43 Required Supplementary Information

Notes to Required Supplementary Schedules

Valuation Date:	December 31, 2010
Actuarial Cost Method:	Projected Unit Credit
Amortization Method	<p>The UAL is amortized as a level percentage of payroll. The Tier 1/Tier 2 regular UAL and Retiree Healthcare regular UAL as of December 31, 2007 are amortized over a closed period. For the Tier 1/Tier 2 UAL, this period is 20 years; for Retiree Healthcare it is 10 years. Gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over 20 years (10 years for Retiree Healthcare) from the odd-year valuation in which they are first recognized. Contribution rates effective July 1, 2007 through June 30, 2011 reflect an accelerated amortization of the change in UAL due to the change from Entry Age Normal to Projected Unit Credit on December 31, 2004.</p> <p>Gains and losses for OPSRP benefits are amortized over a closed 16 years from the odd-year valuation in which they are first recognized.</p>
Equivalent Single Amortization Period:	
Pension	30 years
RHIA	10 years
RHIPA	10 years
<p>The Equivalent Single Amortization Period (ESAP) calculation is performed with the ARC-setting valuation. This was calculated most recently in the December 31, 2009 actuarial valuation and the ESAPs for that valuation are shown above. The ARC for the July 2007-June 2009 and July 2009-June 2011 biennia were based on the December 31, 2005 and December 31, 2007 valuations, respectively.</p>	
Actuarial Assumptions:	
Investment Rate of Return:	8.00 percent
Payroll Growth:	3.75 percent
Consumer Price Inflation:	2.75 percent
Health Cost Inflation:	Graded from 7.0 percent in 2011 to 4.5 percent in 2029.
Cost-of-Living Adjustments:	2.00 percent
Method used to Value Assets:	The actuarial value of assets equals the fair market value of assets, excluding the Contingency, Capital Preservation and Rate Guarantee Reserves. The Rate Guarantee Reserve is only excluded from assets when it has a balance greater than zero.

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Data

This valuation is based upon the membership of the System as of December 31, 2010.

System Wide Data Exhibits

Valuation Pay and Census Exhibit

The following tables illustrate the breakdown of member counts and valuation payroll for the SLGRP, School District Pool, and independent employers.

SLGRP

	General Service	Police & Fire	Total
Tier 1	\$ 1,528,958,679	\$ 280,550,536	\$ 1,809,509,215
Tier 2	1,237,637,417	285,925,491	1,523,562,908
Tier 1/Tier 2 Valuation Payroll	2,766,596,096	566,476,027	3,333,072,123
OPSRP Valuation Payroll	1,422,892,004	217,463,573	1,640,355,577
Combined Valuation Payroll	\$ 4,189,488,100	\$ 783,939,600	\$ 4,973,427,700

	December 31				
	2010				2009
	Tier 1	Tier 2	OPSRP	Total	
Active Members					
General Service	23,618	22,609	40,637	86,864	79,173
Police & Fire	3,577	4,240	3,911	11,728	11,766
Total	27,195	26,849	44,548	98,592	90,939
Average Age	53.7	47.5	41.0	46.3	46.4
Average Service	21.0	10.3	3.5	10.2	10.5
Average Valuation Pay	\$ 66,538	\$ 56,746	\$ 36,822	\$ 50,445	\$ 53,333
Active Members outside the Pool with previous Segments in the Pool					
General Service	6,160	4,106		10,266	10,586
Police & Fire	467	415		882	895
Total	6,627	4,521		11,148	11,481
Average Age	52.7	44.8		49.5	49.0
Average Service	2.4	1.4		2.0	1.9
Dormant Members¹					
General Service	13,446	8,701	1,226	23,373	23,486
Police & Fire	708	585	107	1,400	1,352
Total	14,154	9,286	1,333	24,773	24,838
Average Age	55.5	49.7	45.0	52.8	52.1
Average Monthly Benefit	\$ 1,981	\$ 623	\$ 239	\$ 1,378	\$ 1,220
Retired Members and Beneficiaries¹					
General Service	55,389	1,947	70	57,406	55,674
Police & Fire	7,509	347	2	7,858	7,553
Total	62,898	2,294	72	65,264	63,227
Average Age	69.9	64.5	65.2	69.7	69.5
Average Monthly Benefit	\$ 1,884	\$ 606	348	\$ 1,837	\$ 1,784
Grand Total Number of Members	110,874	42,950	45,953	199,777	190,485

¹ Dormant and Retiree counts are by lives within each rate pool. As a result, some individuals may be counted more than once.

Data

System Wide Data Exhibits

School District Pool

	General Service	Police & Fire	Total
Tier 1	\$ 1,126,805,211	\$ 2,486,845	\$1,129,292,056
Tier 2	896,856,376	1,352,755	898,209,131
Tier 1/Tier 2 Valuation Payroll	2,023,661,587	3,839,600	2,027,501,187
OPSRP Valuation Payroll	922,339,226	821,027	923,160,253
Combined Valuation Payroll	\$ 2,946,000,813	\$ 4,660,627	\$2,950,661,440

	December 31				
	2010			2009	
	Tier 1	Tier 2	OPSRP	Total	
Active Members					
General Service	21,285	21,193	37,581	80,059	73,835
Police & Fire	39	28	19	86	93
Total	21,324	21,221	37,600	80,145	73,928
Average Age	53.6	46.8	41.4	46.1	46.2
Average Service	20.5	10.1	3.8	9.9	10.1
Average Valuation Pay	\$ 52,959	\$ 42,326	\$ 24,552	\$ 36,817	\$ 38,872
Active Members outside the Pool with previous Segments in the Pool					
General Service	2,542	1,764		4,306	4,420
Police & Fire	12	9		21	21
Total	2,554	1,773		4,327	4,441
Average Age	54.4	46.8		51.3	50.6
Average Service	4.3	2.0		3.4	3.3
Dormant Members¹					
General Service	8,206	6,148	947	15,301	15,152
Police & Fire	51	27	0	78	75
Total	8,257	6,175	947	15,379	15,227
Average Age	56.6	48.6	47.0	52.8	52.3
Average Monthly Benefit	\$ 1,639	\$ 513	\$ 174	\$ 1,097	\$ 964
Retired Members and Beneficiaries¹					
General Service	55,395	1,012	28	56,435	55,344
Police & Fire	142	17	0	159	150
Total	55,537	1,029	28	56,594	55,494
Average Age	71.0	64.9	65.2	70.9	70.6
Average Monthly Benefit	\$ 1,971	\$ 562	405	\$ 1,945	\$ 1,886
Grand Total Number of Members	87,672	30,198	38,575	156,445	149,090

¹ Dormant and Retiree counts are by lives within each rate pool. As a result, some individuals may be counted more than once.

Data

System Wide Data Exhibits

Independents

	General Service	Police & Fire	Total
Tier 1	\$ 201,378,982	\$ 100,463,902	\$ 301,842,884
Tier 2	181,036,489	86,836,576	267,873,065
Tier 1/Tier 2 Valuation Payroll	382,415,471	187,300,478	569,715,949
OPSRP Valuation Payroll	196,714,914	59,544,499	256,259,413
Combined Valuation Payroll	\$ 579,130,385	\$ 246,844,977	\$ 825,975,362

	December 31				
	2010			2009	
	Tier 1	Tier 2	OPSRP	Total	
Active Members					
General Service	3,145	3,241	5,345	11,731	10,683
Police & Fire	1,122	1,078	901	3,101	3,056
Total	4,267	4,319	6,246	14,832	13,739
Average Age	52.7	46.1	40.5	45.6	45.7
Average Service	20.4	10.3	3.5	10.3	10.6
Average Valuation Pay	\$ 70,739	\$ 62,022	\$ 41,028	\$ 55,689	\$ 57,387
Active Members outside the Pool with previous Segments in the Pool					
General Service	1,776	1,464		3,240	3,307
Police & Fire	396	331		727	723
Total	2,172	1,795		3,967	4,030
Average Age	52.4	44.9		49.0	48.2
Average Service	4.0	2.2		3.2	3.2
Dormant Members¹					
General Service	1,755	1,264	160	3,179	3,217
Police & Fire	249	138	17	404	387
Total	2,004	1,402	177	3,583	3,604
Average Age	54.9	49.3	46.6	52.3	51.7
Average Monthly Benefit	\$ 1,659	\$ 581	\$ 246	\$ 1,167	\$ 987
Retired Members and Beneficiaries¹					
General Service	7,552	390	15	7,957	7,641
Police & Fire	2,474	57	0	2,531	2,449
Total	10,026	447	15	10,488	10,090
Average Age	68.8	63.9	64.1	68.6	68.4
Average Monthly Benefit	\$ 1,907	\$ 605	280	\$ 1,849	\$ 1,789
Grand Total Number of Members	18,469	7,963	6,438	32,870	31,463

¹ Dormant and Retiree counts are by lives within each rate pool. As a result, some individuals may be counted more than once.

Data

System Wide Data Exhibits

Total

	General Service	Police & Fire	Total
Tier 1	\$ 2,857,142,872	\$ 383,501,283	\$ 3,240,644,155
Tier 2	2,315,530,282	374,114,822	2,689,645,104
Tier 1/Tier 2 Valuation Payroll	5,172,673,154	757,616,105	5,930,289,259
OPSRP Valuation Payroll	2,541,946,144	277,829,099	2,819,775,243
Combined Valuation Payroll	\$ 7,714,619,298	\$ 1,035,445,204	\$ 8,750,064,502

	December 31				
	2010				2009
	Tier 1	Tier 2	OPSRP	Total	
Active Members					
General Service	48,048	47,043	83,563	178,654	163,691
Police & Fire	4,738	5,346	4,831	14,915	14,915
Total	52,786	52,389	88,394	193,569	178,606
Average Age	53.6	47.1	41.1	46.1	46.2
Average Service	20.7	10.2	3.6	10.1	10.3
Average Valuation Pay	\$ 61,392	\$ 51,340	\$ 31,900	\$ 45,204	\$ 47,659
Dormant Members¹					
General Service	23,407	16,113	2,333	41,853	41,855
Police & Fire	1,008	750	124	1,882	1,814
Total	24,415	16,863	2,457	43,735	43,669
Average Age	55.8	49.3	45.9	52.7	52.1
Average Monthly Benefit	\$ 1,839	\$ 579	\$ 214	\$ 1,262	\$ 1,111
Retired Members and Beneficiaries¹					
General Service	118,336	3,349	113	121,798	118,659
Police & Fire	10,125	421	2	10,548	10,152
Total	128,461	3,770	115	132,346	128,811
Average Age	70.3	64.5	65.1	70.1	69.9
Average Monthly Benefit	\$ 1,923	\$ 594	\$ 353	\$ 1,884	\$ 1,828
Grand Total Number of Members	205,662	73,022	90,966	369,650	351,086

¹ Dormant and Retiree counts are by lives within each rate pool. As a result, some individuals may be counted more than once.

Data

System Wide Data Exhibits

Age/Service and Valuation Payroll by Tier and Job Class

Tier 1 General Service Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	0	0	0	0	0	0	0	0	0	0
\$	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
\$	0	0	0	0	0	0	0	0	0	0
30-34	0	2	24	13	0	0	0	0	0	39
\$	0	3,213	47,378	50,133	0	0	0	0	0	46,032
35-39	1	24	409	384	14	0	0	0	0	832
\$	118,761	26,147	54,148	56,187	58,568	0	0	0	0	54,433
40-44	10	92	970	2,419	466	7	0	0	0	3,964
\$	90,110	21,624	56,236	62,330	60,208	51,101	0	0	0	59,695
45-49	9	119	906	3,074	2,431	522	15	0	0	7,076
\$	66,224	34,518	53,044	61,860	65,136	60,491	52,249	0	0	61,281
50-54	14	114	1,103	4,035	3,372	2,347	614	10	0	11,609
\$	61,174	39,876	47,591	57,776	62,664	67,355	63,395	60,696	0	60,293
55-59	7	105	1,089	4,753	4,155	2,635	1,461	168	1	14,374
\$	75,463	40,643	48,468	54,815	60,522	67,258	69,438	60,896	39,487	59,728
60-64	9	54	650	2,891	2,548	1,304	660	193	11	8,320
\$	43,573	37,074	47,612	55,075	59,392	65,151	70,870	72,388	55,111	58,919
65-69	4	17	127	564	441	232	115	32	14	1,546
\$	14,538	26,458	42,084	54,323	59,295	70,071	72,715	69,974	86,910	58,677
70-74	1	8	24	85	47	23	14	5	11	218
\$	0	0	0	0	0	0	0	0	0	0
75+	0	2	12	20	17	8	3	2	6	70
\$	0	0	0	0	0	0	0	0	0	0
Total	55	537	5,314	18,238	13,491	7,078	2,882	410	43	48,048
\$	62,743	33,513	50,331	57,390	61,335	66,185	68,110	65,970	43,313	59,455

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Tier 2 General Service Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	3	2	0	0	0	0	0	0	0	5
\$	9,746	15,702	0	0	0	0	0	0	0	12,128
25-29	31	328	24	0	0	0	0	0	0	383
\$	34,087	36,720	42,839	0	0	0	0	0	0	36,890
30-34	116	3,088	809	0	0	0	0	0	0	4,013
\$	30,524	47,138	49,282	0	0	0	0	0	0	47,090
35-39	97	3,582	3,646	0	0	0	0	0	0	7,325
\$	24,979	50,048	55,793	0	0	0	0	0	0	52,576
40-44	59	3,334	4,021	0	0	0	0	0	0	7,414
\$	27,704	50,488	56,410	0	0	0	0	0	0	53,519
45-49	40	3,232	3,893	0	0	0	0	0	0	7,165
\$	25,772	47,275	52,942	0	0	0	0	0	0	50,234
50-54	43	3,231	4,490	0	0	0	0	0	0	7,764
\$	28,331	45,261	48,427	0	0	0	0	0	0	46,998
55-59	45	2,793	4,297	0	0	0	0	0	0	7,135
\$	25,705	45,741	49,458	0	0	0	0	0	0	47,853
60-64	52	1,747	2,466	0	0	0	0	0	0	4,265
\$	26,047	46,960	50,033	0	0	0	0	0	0	48,482
65-69	23	533	687	0	0	0	0	0	0	1,243
\$	21,575	43,560	48,648	0	0	0	0	0	0	45,965
70-74	2	124	127	0	0	0	0	0	0	253
\$	0	0	0	0	0	0	0	0	0	0
75+	1	32	45	0	0	0	0	0	0	78
\$	0	0	0	0	0	0	0	0	0	0
Total	512	22,026	24,505	0	0	0	0	0	0	47,043
\$	27,228	47,093	51,582	0	0	0	0	0	0	49,215

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Data

System Wide Data Exhibits

Age/Service and Valuation Payroll by Tier and Job Class

Tier 1 Police and Fire Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	0	0	0	0	0	0	0	0	0	0
\$	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0
\$	0	0	0	0	0	0	0	0	0	0
30-34	0	0	4	1	0	0	0	0	0	5
\$	0	0	87,775	81,481	0	0	0	0	0	86,516
35-39	0	2	102	147	0	0	0	0	0	251
\$	0	61,613	80,242	86,110	0	0	0	0	0	83,530
40-44	0	4	183	725	138	1	0	0	0	1,051
\$	0	40,144	78,620	85,318	85,221	82,376	0	0	0	83,964
45-49	1	4	79	472	638	97	1	0	0	1,292
\$	94,557	61,250	80,330	81,617	85,574	91,659	48,258	0	0	84,168
50-54	0	2	49	283	384	276	69	0	0	1,063
\$	0	69,488	65,668	76,827	83,722	89,839	88,486	0	0	82,925
55-59	0	1	27	160	253	163	80	14	0	698
\$	0	97,670	62,650	72,960	77,209	81,550	86,145	87,658	0	77,948
60-64	0	0	26	84	111	59	30	5	0	315
\$	0	0	60,219	68,222	71,385	80,128	84,406	100,175	0	72,955
65-69	1	0	5	18	16	10	1	2	1	54
\$	0	0	0	0	0	0	0	0	0	0
70-74	0	0	1	3	0	1	1	0	0	6
\$	0	0	0	0	0	0	0	0	0	0
75+	0	0	2	0	1	0	0	0	0	3
\$	0	0	0	0	0	0	0	0	0	0
Total	2	13	478	1,893	1,541	607	182	21	1	4,738
\$	47,279	58,881	74,779	80,436	81,741	85,319	85,591	82,290	0	81,032

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Tier 2 Police and Fire Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	0	0	0	0	0	0	0	0	0	0
\$	0	0	0	0	0	0	0	0	0	0
25-29	3	35	2	0	0	0	0	0	0	40
\$	56,683	67,017	75,250	0	0	0	0	0	0	66,654
30-34	8	484	195	0	0	0	0	0	0	687
\$	57,345	72,007	75,908	0	0	0	0	0	0	72,943
35-39	4	554	1,005	0	0	0	0	0	0	1,563
\$	69,362	71,919	75,692	0	0	0	0	0	0	74,339
40-44	2	367	912	0	0	0	0	0	0	1,281
\$	44,471	67,985	75,523	0	0	0	0	0	0	73,315
45-49	1	192	492	0	0	0	0	0	0	685
\$	33,969	65,877	70,602	0	0	0	0	0	0	69,224
50-54	2	151	316	0	0	0	0	0	0	469
\$	33,598	60,806	63,551	0	0	0	0	0	0	62,540
55-59	1	112	249	0	0	0	0	0	0	362
\$	42,601	58,282	62,582	0	0	0	0	0	0	61,197
60-64	2	70	135	0	0	0	0	0	0	207
\$	32,714	58,564	62,652	0	0	0	0	0	0	60,980
65-69	0	17	26	0	0	0	0	0	0	43
\$	0	0	0	0	0	0	0	0	0	0
70-74	0	1	5	0	0	0	0	0	0	6
\$	0	0	0	0	0	0	0	0	0	0
75+	0	1	2	0	0	0	0	0	0	3
\$	0	0	0	0	0	0	0	0	0	0
Total	23	1,984	3,339	0	0	0	0	0	0	5,346
\$	52,365	67,766	71,506	0	0	0	0	0	0	70,036

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Data

System Wide Data Exhibits

Age/Service and Valuation Payroll by Tier and Job Class

All Tier 1/Tier 2 Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	3	2	0	0	0	0	0	0	0	5
\$	9,746	15,702	0	0	0	0	0	0	0	12,128
25-29	34	363	26	0	0	0	0	0	0	423
\$	36,081	39,641	45,332	0	0	0	0	0	0	39,705
30-34	124	3,574	1,032	14	0	0	0	0	0	4,744
\$	32,254	50,482	54,418	52,372	0	0	0	0	0	50,867
35-39	102	4,162	5,162	531	14	0	0	0	0	9,971
\$	27,639	52,827	60,020	64,471	58,568	0	0	0	0	56,921
40-44	71	3,797	6,086	3,144	604	8	0	0	0	13,710
\$	36,966	51,469	59,915	67,631	65,923	55,010	0	0	0	59,488
45-49	51	3,547	5,370	3,546	3,069	619	16	0	0	16,218
\$	34,420	47,869	54,980	64,490	69,384	65,375	52,000	0	0	58,559
50-54	59	3,498	5,958	4,318	3,756	2,623	683	10	0	20,905
\$	36,303	45,771	49,216	59,024	64,817	69,721	65,930	60,696	0	56,556
55-59	53	3,011	5,662	4,913	4,408	2,798	1,541	182	1	22,569
\$	32,595	46,047	49,908	55,406	61,480	68,091	70,305	62,954	39,487	56,561
60-64	63	1,871	3,277	2,975	2,659	1,363	690	198	11	13,107
\$	28,762	47,109	50,154	55,446	59,893	65,799	71,458	73,090	55,111	55,892
65-69	28	567	845	582	457	242	116	34	15	2,886
\$	19,799	41,742	45,877	52,643	57,219	67,175	72,088	65,858	81,116	51,230
70-74	3	133	157	88	47	24	15	5	11	483
\$	0	0	0	0	0	0	0	0	0	0
75+	1	35	61	20	18	8	3	2	6	154
\$	0	0	0	0	0	0	0	0	0	0
Total	592	24,560	33,636	20,131	15,032	7,685	3,064	431	44	105,175
\$	31,572	48,473	53,692	59,557	63,427	67,696	69,148	66,765	42,328	56,385

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Age/Service and Valuation Payroll by Rate Pool

Tier 1/Tier 2 SLGRP Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	2	0	0	0	0	0	0	0	0	2
\$	9,212	0	0	0	0	0	0	0	0	9,212
25-29	22	205	20	0	0	0	0	0	0	247
\$	35,104	44,158	44,659	0	0	0	0	0	0	43,392
30-34	58	1,511	637	9	0	0	0	0	0	2,215
\$	36,926	52,386	54,020	53,595	0	0	0	0	0	52,456
35-39	37	1,944	2,571	354	13	0	0	0	0	4,919
\$	31,922	55,687	61,799	66,609	58,836	0	0	0	0	59,498
40-44	32	1,886	3,224	1,624	406	6	0	0	0	7,178
\$	30,113	57,231	62,063	69,119	66,815	57,912	0	0	0	62,513
45-49	23	1,693	2,848	1,853	1,615	395	12	0	0	8,439
\$	28,327	55,313	61,230	67,638	70,708	67,088	53,925	0	0	63,438
50-54	33	1,635	2,824	2,135	2,003	1,171	415	10	0	10,226
\$	27,741	54,845	57,934	67,544	68,514	70,584	66,844	60,696	0	63,234
55-59	24	1,566	2,878	2,284	2,290	1,469	759	127	1	11,398
\$	30,079	53,805	57,826	64,163	67,118	72,103	72,310	63,697	39,487	63,220
60-64	34	1,069	1,787	1,558	1,415	801	436	117	9	7,226
\$	33,262	53,151	56,608	63,311	67,332	73,819	75,584	72,687	53,865	62,842
65-69	12	365	515	347	295	157	79	24	8	1,802
\$	29,146	48,370	51,965	58,203	61,738	76,881	83,847	77,988	76,257	57,909
70-74	3	79	94	48	30	18	12	3	8	295
\$	0	0	0	0	0	0	0	0	0	0
75+	0	24	29	15	14	6	2	2	5	97
\$	0	0	0	0	0	0	0	0	0	0
Total	280	11,977	17,427	10,227	8,081	4,023	1,715	283	31	54,044
\$	31,595	53,974	58,909	65,633	67,629	71,245	71,632	67,394	36,591	61,604

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Data

System Wide Data Exhibits

Age/Service and Valuation Payroll by Tier and Job Class

Tier 1/Tier 2 School District Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	1	1	0	0	0	0	0	0	0	2
\$	10,815	9,186	0	0	0	0	0	0	0	10,001
25-29	8	123	4	0	0	0	0	0	0	135
\$	32,505	29,096	34,991	0	0	0	0	0	0	29,472
30-34	59	1,746	270	3	0	0	0	0	0	2,078
\$	25,232	46,330	48,200	37,543	0	0	0	0	0	45,961
35-39	55	1,830	2,100	100	0	0	0	0	0	4,085
\$	22,807	47,201	55,234	49,189	0	0	0	0	0	51,051
40-44	29	1,604	2,272	1,202	117	2	0	0	0	5,226
\$	25,746	42,840	53,546	62,308	58,442	46,306	0	0	0	52,228
45-49	19	1,594	2,108	1,376	1,147	172	2	0	0	6,418
\$	20,122	37,867	44,152	57,926	65,029	57,644	38,443	0	0	49,564
50-54	16	1,607	2,721	1,874	1,407	1,262	212	0	0	9,099
\$	22,751	34,903	38,394	47,622	57,690	67,393	59,894	0	0	47,157
55-59	21	1,248	2,358	2,293	1,749	1,132	673	36	0	9,510
\$	18,466	34,594	38,932	45,394	52,367	62,070	67,727	57,128	0	47,207
60-64	20	658	1,214	1,211	1,027	474	224	70	1	4,899
\$	11,947	36,305	38,960	44,828	48,728	51,793	61,943	72,293	64,588	44,765
65-69	11	172	272	194	130	68	30	8	6	891
\$	10,793	27,373	33,757	43,145	48,292	51,716	49,020	34,845	101,113	38,754
70-74	0	48	51	32	13	5	3	1	3	156
\$	0	0	0	0	0	0	0	0	0	0
75+	1	11	24	4	3	2	1	0	0	46
\$	0	0	0	0	0	0	0	0	0	0
Total	240	10,642	13,394	8,289	5,593	3,117	1,145	115	10	42,545
\$	21,885	40,198	44,544	50,141	55,517	62,043	64,367	64,312	67,126	47,737

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Tier 1/Tier 2 Independent Employers Active Members

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
20-24	0	1	0	0	0	0	0	0	0	1
\$	0	22,217	0	0	0	0	0	0	0	22,217
25-29	4	35	2	0	0	0	0	0	0	41
\$	48,608	50,249	72,744	0	0	0	0	0	0	51,186
30-34	7	317	125	2	0	0	0	0	0	451
\$	52,738	64,269	69,873	69,114	0	0	0	0	0	65,665
35-39	10	388	491	77	1	0	0	0	0	967
\$	38,371	65,032	71,175	74,485	55,083	0	0	0	0	68,618
40-44	10	307	590	318	81	0	0	0	0	1,306
\$	91,434	61,145	72,699	80,153	72,259	0	0	0	0	71,914
45-49	9	260	414	317	307	52	2	0	0	1,361
\$	80,177	60,725	67,122	74,576	78,693	77,933	54,002	0	0	70,726
50-54	10	256	413	309	346	190	56	0	0	1,580
\$	86,241	56,034	60,906	69,314	72,398	79,860	82,008	0	0	67,465
55-59	8	197	426	336	369	197	109	19	0	1,661
\$	77,233	56,933	57,167	64,210	69,681	72,774	72,267	69,029	0	64,418
60-64	9	144	276	206	217	88	30	11	1	982
\$	49,131	51,618	57,598	58,387	64,226	68,244	82,540	82,445	56,848	60,267
65-69	5	30	58	41	32	17	7	2	1	193
\$	17,181	43,480	48,651	50,526	51,828	39,375	38,242	44,345	0	46,466
70-74	0	6	12	8	4	1	0	1	0	32
\$	0	0	0	0	0	0	0	0	0	0
75+	0	0	8	1	1	0	0	0	1	11
\$	0	0	0	0	0	0	0	0	0	0
Total	72	1,941	2,815	1,615	1,358	545	204	33	3	8,586
\$	63,772	59,889	64,914	69,408	71,005	73,830	75,105	69,913	18,949	66,389

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Data

System Wide Data Exhibits

Age/Service and Valuation Payroll by Tier and Job Class

OPSRP Active General Service Members Age/Service and Valuation Payroll

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
0-20	912	0	0	0	0	0	0	0	0	912
\$	3,070	0	0	0	0	0	0	0	0	3,070
20-24	3,868	214	0	0	0	0	0	0	0	4,082
\$	12,310	13,045	0	0	0	0	0	0	0	12,349
25-29	9,529	2,054	0	0	0	0	0	0	0	11,583
\$	28,487	35,021	0	0	0	0	0	0	0	29,646
30-34	8,513	4,297	0	0	0	0	0	0	0	12,810
\$	33,035	41,737	0	0	0	0	0	0	0	35,954
35-39	7,333	3,517	0	0	0	0	0	0	0	10,850
\$	32,276	41,970	0	0	0	0	0	0	0	35,419
40-44	7,077	3,798	0	0	0	0	0	0	0	10,875
\$	29,371	38,001	0	0	0	0	0	0	0	32,385
45-49	5,740	3,720	0	0	0	0	0	0	0	9,460
\$	29,319	35,640	0	0	0	0	0	0	0	31,805
50-54	4,980	3,488	0	0	0	0	0	0	0	8,468
\$	29,480	33,582	0	0	0	0	0	0	0	31,170
55-59	4,203	2,860	0	0	0	0	0	0	0	7,063
\$	29,030	33,630	0	0	0	0	0	0	0	30,893
60-64	2,563	1,990	0	0	0	0	0	0	0	4,553
\$	26,699	32,319	0	0	0	0	0	0	0	29,156
65-69	958	775	0	0	0	0	0	0	0	1,733
\$	16,580	21,497	0	0	0	0	0	0	0	18,779
70-74	384	323	0	0	0	0	0	0	0	707
\$	*	*	0	0	0	0	0	0	0	*
75+	197	270	0	0	0	0	0	0	0	467
\$	*	*	0	0	0	0	0	0	0	*
Total	56,257	27,306	0	83,563						
\$	27,891	35,629	0	30,420						

Valuation payroll excludes projected pay for members over the mandatory retirement age.

OPSRP Active Police and Fire Members Age/Service and Valuation Payroll

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20	1	0	0	0	0	0	0	0	0	1
\$	713	0	0	0	0	0	0	0	0	713
20-24	161	9	0	0	0	0	0	0	0	170
\$	45,196	46,465	0	0	0	0	0	0	0	45,263
25-29	855	285	0	0	0	0	0	0	0	1,140
\$	55,207	64,489	0	0	0	0	0	0	0	57,528
30-34	761	511	0	0	0	0	0	0	0	1,272
\$	57,718	67,728	0	0	0	0	0	0	0	61,739
35-39	474	344	0	0	0	0	0	0	0	818
\$	56,487	64,979	0	0	0	0	0	0	0	60,058
40-44	330	211	0	0	0	0	0	0	0	541
\$	49,793	64,862	0	0	0	0	0	0	0	55,670
45-49	159	157	0	0	0	0	0	0	0	316
\$	50,178	58,903	0	0	0	0	0	0	0	54,513
50-54	144	95	0	0	0	0	0	0	0	239
\$	50,329	57,895	0	0	0	0	0	0	0	53,337
55-59	121	66	0	0	0	0	0	0	0	187
\$	56,007	59,582	0	0	0	0	0	0	0	57,269
60-64	57	53	0	0	0	0	0	0	0	110
\$	56,648	54,011	0	0	0	0	0	0	0	55,377
65-69	15	12	0	0	0	0	0	0	0	27
\$	*	*	0	0	0	0	0	0	0	*
70-74	4	4	0	0	0	0	0	0	0	8
\$	*	*	0	0	0	0	0	0	0	*
75+	2	0	0	0	0	0	0	0	0	2
\$	*	*	0	0	0	0	0	0	0	*
Total	3,084	1,747	0	4,831						
\$	54,099	63,531	0	57,510						

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Data

System Wide Data Exhibits

Age/Service and Valuation Payroll by Tier and Job Class

All OPSRP Active Members Age/Service and Valuation Payroll

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
<20	913	0	0	0	0	0	0	0	0	913
\$	3,067	0	0	0	0	0	0	0	0	3,067
20-24	4,029	223	0	0	0	0	0	0	0	4,252
\$	13,625	14,394	0	0	0	0	0	0	0	13,665
25-29	10,384	2,339	0	0	0	0	0	0	0	12,723
\$	30,687	38,611	0	0	0	0	0	0	0	32,144
30-34	9,274	4,808	0	0	0	0	0	0	0	14,082
\$	35,060	44,499	0	0	0	0	0	0	0	38,283
35-39	7,807	3,861	0	0	0	0	0	0	0	11,668
\$	33,746	44,020	0	0	0	0	0	0	0	37,146
40-44	7,407	4,009	0	0	0	0	0	0	0	11,416
\$	30,281	39,415	0	0	0	0	0	0	0	33,489
45-49	5,899	3,877	0	0	0	0	0	0	0	9,776
\$	29,881	36,582	0	0	0	0	0	0	0	32,539
50-54	5,124	3,583	0	0	0	0	0	0	0	8,707
\$	30,066	34,227	0	0	0	0	0	0	0	31,778
55-59	4,324	2,926	0	0	0	0	0	0	0	7,250
\$	29,785	34,216	0	0	0	0	0	0	0	31,573
60-64	2,620	2,043	0	0	0	0	0	0	0	4,663
\$	27,351	32,882	0	0	0	0	0	0	0	29,774
65-69	973	787	0	0	0	0	0	0	0	1,760
\$	16,325	21,169	0	0	0	0	0	0	0	18,491
70-74	388	327	0	0	0	0	0	0	0	715
\$	0	0	0	0	0	0	0	0	0	*
75+	199	270	0	0	0	0	0	0	0	469
\$	0	0	0	0	0	0	0	0	0	*
Total	59,341	29,053	0	88,394						
\$	29,253	37,306	0	31,900						

Valuation payroll excludes projected pay for members over the mandatory retirement age.

Data

System Wide Data Exhibits

Inactive Member Data Exhibits

For the following exhibits, inactive members are counted by lives, not by segments.

Total Tier 1/Tier 2

Dormants

	Count	Average Monthly Benefit
0-20	0	\$ 0
20-24	3	82
25-29	226	342
30-34	1,352	725
35-39	2,773	1,163
40-44	3,728	1,430
45-49	4,431	1,612
50-54	6,440	1,669
55-59	8,306	1,647
60-64	5,880	1,543
65-69	2,210	1,244
70-74	680	1,108
75+	867	1,029
Total	36,896	\$ 1,481

Benefits in Force

	Count	Average Monthly Benefit
0-45	533	\$ 1,267
45-49	366	1,649
50-54	1,516	2,625
55-59	8,568	3,041
60-64	23,438	2,746
65-69	24,193	2,474
70-74	18,489	2,169
75-79	13,651	1,862
80-84	10,620	1,503
85-90	7,539	1,137
90-94	3,429	868
95-99	887	731
100+	120	789
Total	113,349	\$ 2,199

OPSRP

Dormants

	Count	Average Monthly Benefit
0-20	0	\$ 0
20-24	11	113
25-29	217	199
30-34	438	243
35-39	337	254
40-44	268	258
45-49	229	239
50-54	219	233
55-59	238	224
60-64	188	203
65-69	225	86
70-74	76	51
75+	11	91
Total	2,457	\$ 215

Benefits in Force

	Count	Average Monthly Benefit
0-45	1	\$ 1,168
45-49	0	0
50-54	0	0
55-59	8	421
60-64	34	308
65-69	63	364
70-74	6	242
75-79	3	395
80-84	0	0
85-90	0	0
90-94	0	0
95-99	0	0
100+	0	0
Total	115	\$ 353

Data

System Wide Data Exhibits

Inactive Member Data Exhibits

System-Wide Totals

Dormants

	Count	Average Monthly Benefit
0-20	0	\$ 0
20-24	14	106
25-29	443	272
30-34	1,790	607
35-39	3,110	1,064
40-44	3,996	1,352
45-49	4,660	1,545
50-54	6,659	1,622
55-59	8,544	1,607
60-64	6,068	1,501
65-69	2,435	1,137
70-74	756	1,001
75+	878	1,017
Total	39,353	\$ 1,402

Benefits in Force

	Count	Average Monthly Benefit
0-45	534	\$ 1,267
45-49	366	1,649
50-54	1,516	2,625
55-59	8,576	3,039
60-64	23,472	2,742
65-69	24,256	2,469
70-74	18,495	2,168
75-79	13,654	1,862
80-84	10,620	1,503
85-90	7,539	1,137
90-94	3,429	868
95-99	887	731
100+	120	789
Total	113,464	\$ 2,198

Data

System Wide Data Exhibits

Retiree Healthcare Member Data Exhibits

For the following exhibits, inactive members are counted by lives, not by segments.

RHIA Members

	As of December 31, 2010	As of December 31, 2009
Dormant Members		
Number	15,519	13,678
Average Age	53.2	53.2
Deferred Members		
Number	31,315	31,653
Average Age	60.4	60.2
Members in Payment		
Number	40,398	39,979
Average Age	75.8	75.7

RHIPA Members

	As of December 31, 2010	As of December 31, 2009
Active Employees of RHIPA Employers		
Number	27,746	29,340
Average Age	51.0	50.4
Average Service	16.1	15.3
Members in Payment		
Number	910	796
Average Age	61.1	60.9
Average Benefit Amount	287	261

8

Actuarial Methods and Assumptions

Tier 1/Tier 2

Actuarial Methods and Valuation Procedures

On July 29, 2011, the Board adopted the following actuarial methods and valuation procedures for the December 31, 2010 and 2011, actuarial valuations of PERS Tier 1/Tier 2 benefits. The actuarial cost method and contribution rate stabilization method were first adopted effective December 31, 2004.

Actuarial cost method

Projected Unit Credit. Under the Projected Unit Credit cost method, the objective is to fund each member's benefit under the plan as it accrues, taking into consideration expected future compensation increases. Thus, the total pension to which each member is expected to become entitled at retirement is broken down into units, each associated with a year of past or future credited service. Typically, when this method is introduced, there will be an initial liability for benefits credited for service prior to that date, and to the extent that the liability is not covered by assets of the plan, there is an unfunded liability to be funded over a stipulated period in accordance with an amortization schedule.

A detailed description of the calculation follows:

- An individual member's **accrued benefit** for valuation purposes related to a particular separation date is the accrued benefit described under the plan, determined using the projected compensation and service that would be used in the calculation of the benefit on the expected separation date, multiplied by the ratio of credited service as of the valuation date over credited service as of the expected separation date. In no event can this be less than the accrued benefit described under the plan, determined using the compensation and service as of the valuation date.
 - The **benefit** deemed to accrue for an individual member during a plan year is the excess of the accrued benefit for valuation purposes at the end of the plan year over the accrued benefit for valuation purposes at the beginning of the plan year. Both accrued benefits are calculated from the same projections to the various anticipated separation dates as described above.
 - An individual member's **accrued liability** is the present value of the accrued benefit for valuation purposes at the beginning of the plan year, and an individual member's **normal cost** is the present value of the benefit deemed to accrue in the plan year. The accrued liability and the normal cost for an individual member are the sum of the component accrued liabilities and normal costs associated with the various anticipated separation dates. Such accrued liabilities and normal costs reflect the accrued benefits as modified to obtain the benefits payable on those dates and the probability of the member separating on those dates.
 - The plan's **normal cost** is the sum of the individual member normal costs, and the plan's **accrued liability** is the sum of the accrued liabilities for all members under the plan.
-

Actuarial Methods and Assumptions

Tier 1/Tier 2

Actuarial Methods and Valuation Procedures

<i>Amortization of change in Unfunded Actuarial Liability (UAL) due to change in actuarial cost method (PUC change UAL)</i>	Contribution rates effective July 1, 2007 through June 30, 2011 reflect an accelerated amortization of the change in UAL that occurred when the PUC cost method was first adopted for the December 31, 2004 valuation. By the time the current contribution rates are changed on July 1, 2013, four years of contributions will have been collected toward the 3-year amortization base. Consequently, the PUC change amortization was eliminated from the December 31, 2009 valuation so it will not be included in contribution rates that become effective July 1, 2013.
<i>Tier 1/Tier 2 UAL and Retiree Healthcare UAL amortization</i>	<p>The Tier 1/Tier 2 regular UAL and Retiree Healthcare regular UAL as of December 31, 2007 are amortized as a level percentage of combined valuation payroll over a closed period. For the Tier 1/Tier 2 UAL, this period is 20 years; for Retiree Healthcare, it is 10 years. Gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over 20 (10 for Retiree Healthcare) years from the odd-year valuation in which they are first recognized.</p> <p>The amortization of the unfunded actuarial liability (UAL) using the current amortization method results in an initial payment less than the "interest only" payment on the UAL. Payments less than the interest only amount will result in the UAL increasing for an initial period of time.</p>
<i>Asset valuation method</i>	<p>The actuarial value of assets equals the market value of assets, excluding the Contingency, and Capital Preservation Reserves and the Rate Guarantee Reserves when it is in positive surplus status.</p> <p>Market values are reported to Mercer by PERS. It is our understanding that select real estate and private equity investments are reported on a three-month lag basis. This valuation report does not attempt to quantify any such effects.</p>
<i>Contribution rate stabilization method</i>	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) are confined to a collar based on the prior contribution rate (prior to application of side accounts, pre-SLGRP liabilities, and 6 percent Independent Employer minimum). The new contribution rate will generally not increase or decrease from the prior contribution rate by more than the greater of 3 percentage points or 20 percent of the prior contribution rate. If the funded percentage excluding side accounts drops below 70% or increases above 130%, the size of the collar doubles. If the funded percentage excluding side accounts is between 70% and 80% or between 120% and 130%, the size of the rate collar is increased on a graded scale.
<i>Allocation of Liability for Service Segments</i>	For active Tier 1/Tier 2 members who have worked for multiple PERS employers over their career, the calculated actuarial accrued liability is allocated among the employers based on a weighted average of the Money Match methodology, which utilizes account balance, and the Full Formula methodology, which utilizes service. The allocation is 40% (10% for police & fire) based on account balance with each employer and 60% (90% for police & fire) based on service with each employer. The entire Normal Cost is allocated to the current employer.
<i>Allocation of Benefits-In-Force (BIF) Reserve</i>	The BIF is allocated to each rate pool in proportion to the retiree liability attributable to the rate pool.

Actuarial Methods and Assumptions

Tier 1/Tier 2

Economic Assumptions

The Board adopted the following economic assumptions for the December 31, 2010 and 2011 actuarial valuations. The investment return assumption was first adopted in 1989, and the regular account interest crediting assumption was adopted in 2003. The healthcare cost inflation assumption was adopted December 31, 2008. This interest crediting assumption for variable account balances was adopted December 31, 2010. All other economic assumptions were first adopted in 2005.

<i>Investment return</i>	8.00% compounded annually			
<i>Interest crediting</i>	8.00% compounded annually on members' regular account balances 8.25% compounded annually on members' variable account balances			
<i>Inflation</i>	2.75% compounded annually			
<i>Payroll growth</i>	3.75% compounded annually. This assumption represents the sum of the inflation assumption and a real wage growth assumption of 100 basis points.			
<i>Healthcare cost inflation</i>	Health cost trend rates are used to predict increases in the RHIPA Maximum Subsidy.			
	Year¹	Rate	Year	Rate
	2011	7.0%	2021	6.0%
	2012	6.9	2022	5.8
	2013	6.9	2023	5.6
	2014	6.9	2024	5.4
	2015	6.9	2025	5.2
	2016	6.8	2026	5.0
	2017	6.8	2027	4.9
	2018	6.6	2028	4.7
	2019	6.4	2029+	4.5
	2020	6.2		

¹ For valuation purposes, the health cost trend rates are assumed to be applied at the beginning of the plan year.

Actuarial Methods and Assumptions

Tier 1/Tier 2

Demographic Assumptions

The Board adopted the following demographic assumptions for the December 31, 2010 and 2011 actuarial valuations.

Mortality

The following mortality tables were first adopted in the December 31, 2010 valuation, except for the Police and Fire male table which was adopted in the December 31, 2008 valuation.

Healthy Retired Members

Basic Table	RP 2000, Generational Combined Active/Healthy Annuitant, Sex Distinct
School District male	White collar, set back 18 months
Other General Service male (including male beneficiary)	Blended 25% blue collar, set back 12 months
Police & Fire male	Blended 33% blue collar, no set back
School District female	White collar, set back 24 months
Other female (including female beneficiary)	White collar, no set back

The following disabled retiree mortality rates were first adopted for the December 31, 2008 actuarial valuation.

Disabled Retired Members

Basic Table	RP 2000, Static, Combined Active/Healthy Annuitant, No Collar, Sex Distinct
Male	Set forward 60 months, min of 2.25%
Female	Set forward 48 months, min of 2.25%

The following mortality rates were first adopted for non-annuitant members for the December 31, 2010 actuarial valuation, except for the School District male, Police & Fire male, and Other General Service female rates which were adopted in the December 31, 2008 valuation.

Non-Annuitant Members

Basic Table	Percent of Healthy Retired Mortality Tables
School District male	75%
Other General Service male	85%
Police & Fire male	70%
School District female	60%
Other female	50%

Actuarial Methods and Assumptions

Tier 1/Tier 2

Demographic Assumptions

Retirement Assumptions

The retirement assumptions used in the actuarial valuation include the following:

- Retirement from active status/dormant status
- Probability a member will elect a lump sum option at retirement
- Percentage of members who elect to purchase credited service at retirement.

Rates of Retirement from Active Status

The following retirement rate assumptions were first adopted in the December 31, 2010 valuation.

Judge members are assumed to retire at age 63.

Age	Police & Fire			General Service		School Districts		General Service (Including School Districts)
	< 13 yrs	13-24 yrs	25+ yrs	<15 yrs	15-29 yrs	<15 yrs	15-29 yrs	30+ yrs
Less than 50								18.00%
50	1.00%	2.00%	25.00%					18.00%
51	1.00%	2.00%	16.50%					18.00%
52	1.00%	2.00%	16.50%					32.00%
53	1.00%	2.00%	16.50%					28.00%
54	1.00%	2.00%	16.50%					27.00%
55	3.00%	7.50%	16.50%	1.00%	3.50%	1.00%	6.00%	26.00%
56	3.00%	7.50%	16.50%	1.00%	3.25%	1.00%	5.00%	25.00%
57	3.00%	7.50%	16.50%	1.00%	3.00%	1.00%	5.00%	24.00%
58	3.00%	7.50%	16.50%	1.50%	9.00%	2.50%	15.00%	28.00%
59	3.00%	7.50%	16.50%	2.00%	8.00%	2.50%	12.00%	21.00%
60	3.00%	7.50%	16.50%	4.00%	8.00%	3.50%	12.00%	21.00%
61	3.00%	7.50%	16.50%	4.00%	8.00%	4.50%	12.00%	21.00%
62	13.00%	22.00%	35.00%	8.50%	15.00%	9.00%	21.00%	29.00%
63	8.00%	20.00%	30.00%	7.00%	13.00%	8.00%	16.00%	22.00%
64	8.00%	10.00%	30.00%	7.00%	13.00%	8.00%	16.00%	22.00%
65	100.00%	100.00%	100.00%	12.00%	22.00%	17.00%	27.00%	26.00%
66				19.00%	31.00%	14.00%	32.00%	18.00%
67				13.00%	25.00%	12.00%	24.00%	18.00%
68				12.00%	21.00%	10.00%	24.00%	18.00%
69				12.00%	21.00%	8.00%	24.00%	18.00%
70				100.00%	100.00%	100.00%	100.00%	100.00%

Actuarial Methods and Assumptions

Tier 1/Tier 2

Demographic Assumptions

Retirement from Dormant Status

Dormant members are assumed to retire at Normal Retirement Age (age 58 for Tier 1, age 60 for Tier 2, age 60 for Judges, and age 55 for Police & Fire) or at the first unreduced retirement age (30 years of service, or age 50 with 25 years of service for Police & Fire).

Lump Sum Option at Retirement

Members retiring may elect to receive a full or partial lump sum at retirement. The probability that a retiring member will elect a lump sum at retirement is summarized in the table below. These rates were first adopted effective December 31, 2010.

Partial Lump Sum:	6% for all years
Total Lump Sum:	5% for 2011, declining by 0.5% per year until reaching 0.0%
No Lump Sum:	89% in 2011, increasing by 0.5% until reaching 94.0%

Purchase of Credited Service at Retirement

The following percentages of members are assumed to purchase credit for the six-month waiting period at retirement. These rates were first adopted effective December 31, 2010.

Money Match Retirements:	0%
Non-Money Match Retirements:	60%

Judge Member Plan Election

All judge members are assumed to elect to retire under the provisions of Plan B.

Disability Assumptions

There are two disability assumptions used in the valuation - duty disability and ordinary disability. Duty Disability rates are separated between Police & Fire and General Service, while ordinary disability is the same for all members. The rates for ordinary disability were first adopted effective December 31, 2010. The rates for duty disability were first adopted effective December 31, 2008.

	Percentage of the 1985 Disability Class 1 Rates
Duty Disability Police & Fire	15%
Duty Disability General Service	1.5%
Ordinary Disability	50% with 0.18% cap

Actuarial Methods and Assumptions

Tier 1/Tier 2

Demographic Assumptions

Termination Assumptions

The termination assumptions used in the actuarial valuation include the following assumptions:

- Termination from active status prior to retirement eligibility
- Probability that a member will not take a lump sum distribution prior to retirement.

The termination assumptions for School District and Police & Fire members were first adopted effective December 31, 2008. The assumptions for General Service members were adopted December 31, 2010.

Termination Rates

Sample termination rates are shown for each group below:

Age	School District	General Service Male	General Service Female	Police & Fire
30	4.32%	6.16%	8.75%	3.45%
40	2.63%	3.64%	4.42%	2.17%
50	1.90%	2.61%	3.00%	1.24%

Probability of Account Withdrawal Before Retirement

None. This assumption was removed effective December 31, 2010.

Actuarial Methods and Assumptions

Tier 1/Tier 2

Salary Increase Assumptions

The salary increase assumptions reflected in the actuarial valuation include:

- Merit scale increases in addition to the payroll growth increase
- Unused Sick Leave adjustments
- Vacation Pay adjustments

Merit Increases

Merit increases are based on duration of service for the following groups with sample rates shown in the following table. The rates were first adopted effective December 31, 2010.

Duration	School	Other General	
	District	Service	Police & Fire
5	2.05%	1.97%	2.55%
10	1.11%	1.00%	1.20%
15	0.35%	0.51%	0.67%
20	-0.18%	0.33%	0.59%

Unused Sick Leave

Members covered by the provision allowing unused sick leave to be used to increase final average salary are assumed to receive increases in their final average salary in accordance with the table below. This adjustment is not applied to disability benefits. Local general service females were adopted effective December 31, 2001, and local general service males were adopted effective December 31, 2005. All other rates were adopted effective December 31, 2010.

Unused Sick Leave	
Actives	
• State General Service Male	6.25%
• State General Service Female	3.75%
• School District Male	8.25%
• School District Female	6.50%
• Local General Service Male	4.25%
• Local General Service Female	3.00%
• State Police & Fire	5.50%
• Local Police & Fire	7.50%
Dormants	2.50%

Actuarial Methods and Assumptions

Tier 1/Tier 2

Salary Increase Assumptions

Vacation Pay

Members eligible to receive a lump sum payment of unused vacation pay are assumed to receive increases in their final average salary in accordance with the table below. This adjustment is not applied to disability benefits. These rates were adopted December 31, 2010.

	Rates
Tier 1 Non-School District/Judges	1.00%
Tier 1 School District	0.25%
Tier 2	0.00%

Retiree Healthcare Participation

The following percentages of eligible retiring members are assumed to elect RHIPA and RHIA coverage:

RHIPA	13%
RHIA	
• Healthy Retired	48%
• Disabled Retired	20%

The RHIA disable retired rate was first adopted December 31, 2008. All other rates were first adopted effective December 31, 2010.

Actuarial Methods and Assumptions

OPSRP

Most of the methods and assumptions adopted for the OPSRP valuation are the same as those used for Tier 1/ Tier 2. A summary of the methods and assumptions that differ for OPSRP are summarized below. The Board adopted the following methods, procedures and assumptions for the December 31, 2010 and December 31, 2011 actuarial valuations

Actuarial Methods and Valuation Procedures

<i>OPSRP UAL amortization</i>	Gains and losses between odd-year valuations are amortized as a level percentage of combined valuation payroll (Tier 1/ Tier 2 plus OPSRP payroll) over 16 years from the valuation in which they are first recognized.
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Economic Assumptions

<i>Administrative expenses</i>	\$6.6 million per year is added to the normal cost.
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Demographic Assumptions

Retirement Assumptions

Retirement from Active Status

Age	Police & Fire			General Service		
	<13 Years	13 - 24 Years	25+ Years	< 15 years	15-29 Years	30+ Years
50	1.00%	2.00%	5.50%			
51	1.00%	2.00%	5.50%			
52	1.00%	2.00%	5.50%			
53	1.00%	2.00%	30.00%			
54	1.00%	2.00%	16.50%			
55	3.00%	5.00%	16.50%	1.00%	5.00%	5.00%
56	3.00%	5.00%	16.50%	1.00%	4.00%	5.00%
57	3.00%	5.00%	16.50%	1.00%	3.00%	7.50%
58	3.00%	5.00%	16.50%	2.00%	3.00%	35.00%
59	3.00%	5.00%	16.50%	2.00%	3.00%	25.00%
60	3.00%	15.00%	16.50%	4.00%	3.75%	20.00%
61	3.00%	8.50%	16.50%	4.00%	5.00%	20.00%
62	13.00%	22.00%	35.00%	7.00%	12.00%	30.00%
63	8.00%	20.00%	30.00%	6.00%	10.00%	20.00%
64	8.00%	10.00%	30.00%	6.00%	10.00%	20.00%
65	100.00%	100.00%	100.00%	14.00%	40.00%	20.00%
66				17.25%	33.00%	20.00%
67				12.00%	22.00%	30.00%
68				10.00%	17.00%	20.00%
69				10.00%	17.00%	20.00%
70				100.00%	100.00%	100.00%

Retirement from Dormant Status

Dormant members are assumed to retire at Normal Retirement Age.

Actuarial Methods and Assumptions

OPSRP

Demographic Assumptions

Termination Assumptions

The termination rates are based on 3-year select and ultimate rates, with the ultimate rates being the same as the Tier 1/Tier 2 termination rates. The following table illustrates sample rates at several ages.

School District					Police & Fire			
Age	1st Select Period	2nd Select Period	3rd Select Period	Ultimate	1st Select Period	2nd Select Period	3rd Select Period	Ultimate
25	11.32%	9.98%	8.64%	7.30%	12.73%	10.18%	7.64%	5.09%
35	6.78%	5.89%	5.00%	4.11%	6.53%	5.22%	3.92%	2.61%
45	4.83%	4.14%	3.45%	2.76%	4.45%	3.56%	2.67%	1.78%

Other General Service Male					Other General Service Female			
Age	1st Select Period	2nd Select Period	3rd Select Period	Ultimate	1st Select Period	2nd Select Period	3rd Select Period	Ultimate
25	20.91%	17.93%	14.94%	11.95%	21.23%	18.20%	15.16%	12.13%
35	13.36%	9.29%	7.74%	6.19%	13.09%	10.92%	9.74%	7.28%
45	10.73%	6.58%	5.04%	3.28%	12.86%	7.81%	6.59%	3.96%

Actuarial Methods and Assumptions

Changes in Actuarial Methods and Assumptions — Tier 1/ Tier 2 and OPSRP

A summary of key changes implemented since the December 31, 2009 valuation are described briefly below. Additional detail and a comprehensive list of changes in methods and assumptions can be found in the report entitled 2010 Experience Study.

Changes in Actuarial Methods and Allocation Procedures

Exclusion of Reserves from Valuation Assets

The Contingency Reserve, Capital Preservation Reserve, and Tier 1 Rate Guarantee Reserve / (Deficit) have historically been excluded from valuation assets. In conjunction with the 2010 Experience Study, the PERS Board elected to refine the treatment of the Tier 1 Rate Guarantee Reserve such that it will only be excluded from valuation assets when it is in positive surplus status.

Money Match Weighting

For purposes of allocating a Tier 1/Tier 2 member's actuarial accrued liability among multiple employers, the valuation uses a weighted average of the Money Match methodology and the Full Formula methodology used by PERS when the member retires. The weights are determined based on the prevalence of each formula among the current Tier 1/Tier 2 population. For the December 31, 2008 and December 31, 2009 valuations, the Money Match method was weighted 50 percent for General Service members and 15 percent for Police & Fire members. This weighting has been adjusted to 40 percent for General Service members and 10 percent for Police & Fire members.

Changes in Economic Assumptions

Variable Account Interest Crediting

The assumed interest crediting for variable account balances was reduced from 8.50% to 8.25%.

Changes in Demographic Assumptions

Mortality

The healthy mortality assumption is based on RP2000 generational mortality tables with group-specific class and setback adjustments. The group-specific adjustments have been updated to more closely match system experience.

Merit Salary Increase

Assumed merit salary increases were lowered for School District and other General Service members. No change was made to the assumption for Police & Fire.

Disability, Retirement and Termination

Rates for the disability, retirement and termination assumptions were adjusted. A distinction was added to separate the ultimate assumed termination rate for OPSRP members from Tier 1/Tier 2 members.

RHIA/RHIPA Assumptions

The participation rate assumptions for healthy retirees eligible for RHIA or RHIPA were increased. The RHIA assumption increased from 42.5 percent to 48 percent. The RHIPA participation assumption increased from 9 percent to 13 percent.

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Summary of Plan Provisions

The following section summarizes the plan provisions considered in the actuarial valuation. A more detailed description of plan provisions is available from the PERS administrative office.

<i>Membership</i>	All employees of public employers participating in this System who are in qualifying positions become members of the System after completing six months of service except those who are eligible for and have elected to participate in an optional retirement plan. Different benefit provisions of the plan apply based on date of hire.	
	Tier 1	Hired prior to 1996
	Tier 2	Hired after 1995 and before August 29, 2003
	OPSRP	Hired after August 28, 2003, not a judge, and not a former Tier 1/Tier 2 member eligible to reestablish Tier 1/Tier 2 membership
	Judges	Members of the State Judiciary
<i>Employee Contributions</i>	Judges	7% of salary
	All others	None
<i>Employer Contributions</i>	Set by the PERS Board based on actuarial calculations that follow Board rate-setting policies for employers.	

Summary of Plan Provisions

Summary of Chapter 238 Provisions — Tier 1/Tier 2 and Judges

<i>Normal Retirement Date</i>	Police and Fire	Age 55
	Judges	Age 65
	Tier 1 General Service	Age 58
	Tier 2 General Service	Age 60
<i>Normal Retirement Allowance</i>	For Members who are not Judges, the greatest of the Full Formula benefit, the Money Match benefit, or the Formula Plus Annuity benefit (only available to Members who made contributions before August 21, 1981). For Members with 15 or more years of creditable service, the benefit will not be less than the minimum service retirement allowance of \$100 per month, as described in ORS 238.310.	
Full Formula	The percentage multiplier from the table below multiplied by final average salary and years of creditable service plus a prior service pension, if applicable.	
	Percentage Multiplier	Membership Classification
	2.00%	Fire, Police and Legislators
	1.67%	All other members
Money Match	The Member's account balance and a matching employer amount converted to an actuarially equivalent annuity.	
Formula Plus Annuity	The Member's account balance converted to an actuarially equivalent cash refund annuity plus the percentage multiplier from the table below multiplied by final average salary and years of creditable service, plus a prior service pension, if applicable.	
	Percentage Multiplier	Membership Classification
	1.35%	Fire, Police and Legislators
	1.00%	All other members

Summary of Plan Provisions

Summary of Chapter 238 Provisions — Tier 1/Tier 2 and Judges

<i>Normal Retirement Allowance (continued)</i>	Judges	Final average salary multiplied by the first percentage multiplier from the table below for up to 16 years of service plus the second percentage multiplier for any service in excess of 16 years, but not to exceed the maximum percentage of final average salary also shown below. Judges must elect Plan A or Plan B no later than age 60. A "Plan B" judge must serve as a pro tem judge for a total of 175 days postretirement.		
		Plan	Percentage Factor (up to 16 years)	Percentage Factor (after 16 years)
		A	2.8125%	1.67%
		B	3.75%	2.00%
				Maximum Percentage of Final Average Salary
				65%
				75%
<i>Final Average Salary</i>	<p>The greater of:</p> <ul style="list-style-type: none"> Average salary earned during the three calendar years in which the member was paid the highest salary, even if one of those years is less than a full calendar year. Total salary earned over the last 36 months of employment divided by the actual months of service during that 36 month period. <p>Covered salary for this purpose includes the value of member contributions assumed and paid by employers, any payment due to an employer's participation in the Unused Sick Leave program, and, for Tier 1 members, lump sum payment of unused vacation time.</p>			
<i>Creditable Service</i>	The number of years and months an active Member is paid a salary by a participating PERS employer and PERS benefits are being funded.			
<i>Prior Service Pension</i>	Benefits payable on account of Prior Service Credit for a member's service with a participating employer prior to the employer's participation in PERS, as described in ORS 238.442.			
<i>SB 656/ HB 3349 Adjustment</i>	All members receive an increase to their monthly retirement benefit equal to the greater of the increase under Senate Bill 656 (SB 656) or House Bill 3349 (HB 3349). The adjustment for SB 656 only applies to members who established membership prior to July 14, 1995.			
	SB 656 Increase	Years of Service	General Service	Police & Fire
		0-9	0.0%	0.0%
		10-14	1.0	1.0
		15-19	1.0	1.0
		20-24	2.0	2.5
		25-29	3.0	4.0
		30 & Over	4.0	4.0
	HB 3349 Increase	$\left(\frac{1}{1 - \text{maximum Oregon personal income tax rate (limited to 9\%)}} - 1 \right) \times$		$\frac{\text{Service prior to October 1, 1991}}{\text{All Service}}$

Summary of Plan Provisions

Summary of Chapter 238 Provisions — Tier 1/Tier 2 and Judges

<i>Early Retirement Eligibility</i>	Police and Fire Judges General Service	Age 50 or 30 years of service Age 60 Age 55 or 30 years of service
<i>Early Retirement Allowance</i>		Normal retirement allowance, actuarially reduced to early retirement age. However, there is no reduction applied if a member has completed 30 years of service (25 years for police & fire members) or for judges in Plan B.
<i>Vesting</i>		Contributions made in any part of five calendar years or attainment of age 50 (45 for police & fire) while working in a qualifying position.
<i>Termination Benefits</i>	Non-Vested Vested	Payment of member's account balance. Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.
<i>Optional Forms of Retirement Allowance</i>		The normal form of benefit is a cash refund annuity (joint and two-thirds survivor contingent annuity for a married judge). All optional amounts are adjusted to be actuarially equivalent. Options Available <ul style="list-style-type: none"> • Life annuity • Cash refund annuity • Life annuity guaranteed 15 years • Joint and 50% or 100% survivor contingent annuity, with or without pop-up feature • Partial Lump Sum: Refund of member contribution account balance plus a pension (under any optional form) of employer-paid portion of the Full Formula or Money Match annuity. • Total Lump Sum: Refund of member contribution account plus a matching employer amount.
<i>Preretirement Death Benefit Eligibility</i>	Judges All others	Six or more years of service. Death occurring while the member is an employee of a participating employer or within 120 days of termination provided the employee does not withdraw the account balance or retire, or a result of injuries received while in the service of a participating employer.
<i>Preretirement Death Benefit</i>	Judges All others	The spouse shall receive a life pension equal to two-thirds of the service retirement allowance. The beneficiary of an unmarried judge shall receive the member's accumulated contributions with interest. The member's account balance plus a matching employer amount.
<i>Additional Police & Fire Death Benefits</i>		Upon the death of a retired police officer or firefighter, the surviving spouse or dependent children under age 18 will receive a monthly benefit based on 25% of the cash refund retirement allowance due to police and fire service.
<i>Disability Benefit Eligibility</i>	Duty Non-Duty	Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service. Disablement occurring after ten years of service (six years, if a judge), but prior to normal retirement eligibility.

Summary of Plan Provisions

Summary of Chapter 238 Provisions — Tier 1/Tier 2 and Judges

<i>Disability Benefits</i>	<p>The normal retirement allowance calculated based on the service credit that would have been earned if the member had continued working to age 58 (age 55 for police and fire, age 65 for judge members) payable commencing immediately.</p>
	<p>Fire and Police Members' Alternative</p>
	<p>In lieu of the above, firefighters and police officers who qualify for duty disability may elect to receive a benefit of 50% of final average monthly salary at the time of disablement.</p>
	<p>Minimum Monthly Retirement Allowance</p>
	<p>Judges 45% of final average monthly salary.</p>
	<p>All others..... \$100 for a member with at least 15 years of creditable service, actuarially reduced if an optional form of benefit is chosen.</p>
	<p>Reduction of Benefits</p>
	<p>Whenever a disabled employee's disability benefit and earned income for any month exceed the monthly salary received at the time of disablement or \$400, if greater, the disability benefit will be reduced by the excess.</p>
	<p>For Tier Two members, the disability benefit may not exceed the member's salary at the time of disablement.</p>
<i>Waiting Time Service Purchases</i>	<p>Members with at least 10 years of combined credited and/or prior service under PERS may elect to purchase service credit for the six-month "waiting time" period worked prior to establishing membership in the system. The waiting time purchase is interest-free and must be purchased in one payment prior to retirement.</p>
<i>Police & Fire Unit Purchases</i>	<p>Police & fire members may purchase 60-month annuity benefits (up to \$80 per month) that must be paid out by age 65 and cannot commence prior to the earliest retirement age. The amount purchased by the member is matched by the employer. In certain situations, such as termination of employment prior to retiring, or working beyond age 65, the employer's matching purchase is forfeited.</p>
<i>Postretirement Adjustments</i>	<p>All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments.</p>
	<p>Automatic Adjustments Benefits are adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics. The maximum adjustment to be made for any year is 2% of the previous year's benefit. Any CPI change in excess of 2% is accumulated for future benefit adjustments which would otherwise be less than 2%. No benefit will be decreased below its original amount.</p>
	<p>Ad Hoc Adjustments From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits.</p>
<i>Variable Annuity Program</i>	<p>Contributions Prior to January 1, 2004, a member could elect to have 25, 50 or 75 percent of his or her contributions invested in the variable account.</p>
	<p>Benefit At retirement, a member may elect to receive a variable annuity with the funds accumulated in his or her variable account. Alternatively, a member may elect to have all or a portion of the funds in his or her variable account transferred back to the regular account and receive an annuity from the System as though no variable annuity program existed. The employer provided benefit, however, is based on the earnings the member would have received in the regular account.</p>

Summary of Plan Provisions

Summary of Chapter 238 Provisions — Tier 1/Tier 2 and Judges

<i>Interest Credit on Member Accounts</i>	Tier 1 Regular	Actuarially assumed rate of return until the rate guarantee reserve has been fully funded for three consecutive years and the Board elects to credit additional interest.
	Tier 2 Regular	Amount determined by the Board based on actual investment earnings of the regular account.
	Variable	Actual earnings in variable account.
<i>Retiree Healthcare – Medicare Supplement (RHIA)</i>	Retiree Eligibility	All of the following must be met: (a) Currently receiving a retirement allowance from the System, (b) Covered for eight years before retirement, (c) Enrolled in a PERS-sponsored health plan, and (d) Enrolled in both Medicare Part A and Part B.
	Surviving Spouse or Dependent Eligibility	A surviving spouse or dependent of a deceased RHIA-eligible retiree is eligible for RHIA benefits if they are enrolled in both Medicare Part A and Part B, and <i>either</i> of the following criteria are met: (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree’s PERS-sponsored health insurance at the time of the retiree’s death and the deceased retiree retired before May 1, 1991.
	Benefit Amount	A monthly contribution of up to \$60 per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.

Summary of Plan Provisions

Summary of Chapter 238 Provisions — Tier 1/Tier 2 and Judges

<i>Retiree Healthcare – Under Age 65 (RHIPA)</i>	Retiree Eligibility	Retired PERS members who were state employees at the time of retirement, are enrolled in a PERS-sponsored health plan, and are not eligible for Medicare.																
	Surviving Spouse or Dependent Eligibility	A surviving spouse or dependent of a deceased RHIPA-eligible retiree is eligible for RHIPA benefits if they are not yet eligible for Medicare, and <i>either</i> of the following criteria are met: (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health plan at the time of the retiree's death and the deceased retiree retired on or after September 29, 1991.																
	Benefit	A percentage (as shown in the table below) of the maximum monthly subsidy based on years of service. The maximum monthly subsidy is calculated annually as the average difference between the health insurance premiums paid by active state employees and the premium retirees would pay if they were rated separately from active state employees. The maximum monthly subsidy for 2011 is \$321.84 per month.																
		<table border="1"> <thead> <tr> <th style="text-align: center;">Years of Service</th> <th style="text-align: center;">Subsidized Amount</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Under 8</td> <td style="text-align: center;">0%</td> </tr> <tr> <td style="text-align: center;">8-9</td> <td style="text-align: center;">50</td> </tr> <tr> <td style="text-align: center;">10-14</td> <td style="text-align: center;">60</td> </tr> <tr> <td style="text-align: center;">15-19</td> <td style="text-align: center;">70</td> </tr> <tr> <td style="text-align: center;">20-24</td> <td style="text-align: center;">80</td> </tr> <tr> <td style="text-align: center;">25-29</td> <td style="text-align: center;">90</td> </tr> <tr> <td style="text-align: center;">30 & Over</td> <td style="text-align: center;">100</td> </tr> </tbody> </table>	Years of Service	Subsidized Amount	Under 8	0%	8-9	50	10-14	60	15-19	70	20-24	80	25-29	90	30 & Over	100
Years of Service	Subsidized Amount																	
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<i>Benefits Not Included in the Valuation</i>	No material benefits have been excluded from the liabilities.																	
<i>Changes in Plan Provisions</i>	There were no changes in plan provisions since the December 31, 2009 actuarial valuation.																	

Summary of Plan Provisions

Summary of Chapter 238A Provisions — OPSRP

<i>Normal Retirement Date</i>	Police & Fire Age 60 or age 53 with 25 years of retirement credit General Service Age 65 or age 58 with 30 years of retirement credit School Districts Age 65 or age 58 with 30 calendar years of active membership
<i>Normal Retirement Allowance</i>	A single life annuity equal to final average salary times years of retirement credit attributable to service as fire and police times 1.8% plus final average salary times all other years of retirement credit times 1.5%
<i>Final Average Salary</i>	<p>The greater of:</p> <ul style="list-style-type: none"> • Average salary earned during the three calendar years in which the member was paid the highest salary, even if one of those years is less than a full calendar year. • Total salary earned over the last 36 months of employment divided by the actual months of service during that 36 month period. <p>Covered salary for this purpose includes base pay, plus overtime up to an average amount, plus bonuses, plus member contributions paid by the employer on a salary reduction basis. Excludes payments of unused vacation or accumulated sick leave at retirement, and member contributions “assumed and paid” by the employer.</p>
<i>Early Retirement Eligibility</i>	Police & Fire Age 50 and 5 years of vesting service General Service Age 55 and 5 years of vesting service
<i>Early Retirement Allowance</i>	Normal retirement allowance, actuarially reduced to early retirement age.
<i>Vesting</i>	Five years or attainment of normal retirement age.
<i>Vested Termination Benefit</i>	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.
<i>Optional Forms of Retirement Benefit</i>	<p>The normal form of benefit is a life annuity. All optional amounts are adjusted to be actuarially equivalent.</p> <p>Options Available</p> <ul style="list-style-type: none"> • Life annuity • Joint and 50% or 100% survivor contingent benefit, with or without pop-up feature • Lump sum if monthly normal retirement benefit is less than \$200 or if lump sum value is less than \$5,000.
<i>Preretirement Death Benefit Eligibility</i>	Death of a vested member before retirement benefits begin.
<i>Preretirement Death Benefit</i>	If member was eligible for early retirement, the actuarial equivalent of 50% of the early retirement benefit the participant was eligible to receive at date of death. If member was not eligible for early retirement, the actuarial equivalent of 50% of the early retirement benefit the participant would have been eligible to receive if he terminated employment on his date of death and retired at the earliest possible date.
<i>Disability Benefit Eligibility</i>	Duty Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service. Non-Duty Disablement occurring after ten years of service, but prior to normal retirement eligibility.

Summary of Plan Provisions

Summary of Chapter 238A Provisions — OPSRP

<i>Disability Benefit Amounts</i>	Preretirement Benefit	45% of salary during last full month of employment before disability, reduced if the total benefit exceeds 75% of salary. Benefit is payable monthly until normal retirement age.
	Retirement Benefit	Same formula as Normal Retirement Benefit, except: Final average salary is adjusted to reflect cost-of-living increases from date of disability to normal retirement age, and Retirement credits continue to accrue from date of disability to normal retirement age.
<i>Postretirement Adjustments</i>		All monthly pension and annuity benefits are eligible for postretirement adjustments.
	Automatic Adjustments	Benefits are adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics. The maximum adjustment to be made for any year is 2% of the previous year's benefit. Any CPI change in excess of 2% is accumulated for future benefit adjustments which would otherwise be less than 2%. No benefit will be decreased below its original amount.
	Ad Hoc Adjustments	From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits.
<i>Changes in Plan Provisions</i>	There were no changes in plan provisions since the December 31, 2009 actuarial valuation.	

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Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service 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 Pension Cost. A measure of the periodic cost of an employer’s participation in a defined benefit pension plan.

Annual Required Contributions (ARC). The employer’s periodic required contributions to a defined benefit pension plan, calculated in accordance with the parameters of GASB 27.

Combined Valuation payroll. Projected payroll 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.

Contribution Deficiencies (excess contributions). The difference between the annual required contributions of the employer(s) (ARC) and the employer’s actual contributions in relation to the ARC.

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. A single actuarial valuation covers all plan members and the same contribution rate(s) applies for each employer.

Glossary

Employer's Contributions. Contributions made in relation to the annual required contributions of the employer (ARC).

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

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.

OPSRP Valuation payroll. Projected payroll 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.

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. 25 of the Governmental Accounting Standards Board (GASB 25). The accounting standard establishing financial reporting standards for defined benefit pension plans.

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. 43 of the Governmental Accounting Standards Board (GASB 43). The accounting standard establishing financial reporting standards for post-employment benefits other than 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.

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

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 Actuarial Accrued Liability. The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.



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