

# Actuarial Exhibits

## Section **Two**





## Office of the State Actuary

*"Securing tomorrow's pensions today."*

**Actuarial Certification Letter  
Report of the Combined  
Actuarial Valuation  
As of June 30, 2011  
September 2012**

This report documents the results of an actuarial valuation of the retirement plans defined under Chapters 41.26, 41.32, 41.35, 41.37, 41.40, and 43.43 of the Revised Code of Washington. The primary purpose of this valuation is to determine contribution requirements for the retirement plans as of the June 30, 2011, valuation date consistent with the prescribed funding policies. This valuation also provides information on the funding progress and developments in the plans over the past year. This valuation report should not be used for other purposes. Please replace this report with a more recent report when available.

The valuation results summarized in this report involve calculations that require assumptions about future economic and demographic events. We believe that the assumptions and methods used in the underlying valuation are reasonable and appropriate for the primary purpose stated above. The use of another set of assumptions and methods, however, could also be reasonable and could produce materially different results. Actual results may vary from our expectations.

The assumptions used in this valuation for investment return, inflation, salary growth, and membership growth were prescribed by the Legislature or adopted by the Pension Funding Council (PFC) and the Law Enforcement Officers' and Fire Fighters' (LEOFF) Plan 2 Board. The PFC and the LEOFF 2 Board adopted updates to the demographic assumptions as part of their review of the *2001 – 2006 Experience Study* results and adoption of the associated contribution rates. Additionally, the LEOFF 2 Board adopted new disability assumptions in the 2010 interim. See the [LEOFF 2 Disability Experience Study](#) available on the LEOFF 2 website. The Legislature was responsible for the selection of the actuarial cost and asset valuation methods. In our opinion, all methods, assumptions, and calculations are reasonable and are in conformity with generally accepted actuarial principles and standards of practice as of the date of this publication.

The Department of Retirement Systems (DRS) provided us with member and beneficiary data. We checked the data for reasonableness as appropriate based on the purpose of the valuation. The Washington State Investment Board (WSIB) and DRS provided financial and asset information. An audit of the financial and participant data was not performed. We relied on all the information provided as complete and accurate. In our opinion, this information is adequate and substantially complete for purposes of this valuation.

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The asset smoothing method adopted during the 2003 Legislative Session (Chapter 11, Laws of 2003, E1) was intended to address the volatility of contribution rates under the aggregate funding method when used in combination with the existing asset allocation policy of WSIB. The combination of the current asset smoothing method with any other funding method or asset allocation policy may not be appropriate. The Legislature may need to revisit the application of the current asset smoothing method with the Plan 1 funding method as the duration of liabilities in those plans becomes shorter.

Under legislation enacted in 2009 (Chapter 561, Laws of 2009), the Unfunded Actuarial Accrued Liability (UAAL) in the Public Employees' Retirement System (PERS) and the Teachers' Retirement System (TRS) Plans 1 must be amortized over a rolling ten-year period, as a level percentage of projected system payroll. The projected payroll includes pay from current active members of PERS, the School Employees' Retirement System, the Public Safety Employees' Retirement System (PSERS), and TRS Plans 2/3 as well as projected payroll from future new members. This is a non-standard amortization method since it includes payroll outside the plan. Additionally, the new funding method includes minimum contribution rates effective at the beginning of the 2015-17 Biennium. All contributions required under this method are necessary to fully amortize the UAAL in these plans near the previous target date of June 30, 2024. Failure to make all future required contributions may result in premature plan insolvency.

During the 2012 Interim, the LEOFF 2 Retirement Board adopted a stable contribution rate policy for 2013-17. The adopted rates are shown in the **Actuarial Exhibits** section of this report. For additional details, please see the Executive Summary and Certification Letter in the 2011 LEOFF 2 Actuarial Valuation report, available on the [LEOFF 2 website](#).

During the 2012 Interim, the PFC adopted stable normal cost rates in PSERS and the Washington State Patrol Retirement System (WSPRS) to prevent a temporary rate decrease, followed by an expected contribution rate increase. This temporary funding policy produces contribution rates, at June 30, 2011, that exceed the requirements under the plans' actuarial cost method and long-term funding policy. In our opinion, this temporary funding policy is reasonable and consistent with the PFC's goals. The adoption of normal cost contribution rates for PSERS and WSPRS below the current stable normal cost rates could also be reasonable, but potentially inconsistent with the PFC's goals.

The undersigned, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. While this report is intended to be complete, we are available to offer extra advice and explanations as needed.

Sincerely,

Matthew M. Smith, FCA, EA, MAAA  
State Actuary

Lisa A. Won, ASA, FCA, MAAA  
Actuary

# Contribution Rates

Member and Employer Rate Summary				
	Plan 1		Plan 2/3	
	2011	2010	2011	2010
<b>PERS</b>				
Member*	6.00%	6.00%	4.92%	4.91%
Employer (Normal Cost)	5.03%	5.02%	5.03%	5.02%
Employer (Plan 1 UAAL)	4.00%	3.39%	4.00%	3.39%
Total Employer	9.03%	8.41%	9.03%	8.41%
<b>TRS</b>				
Member*	6.00%	6.00%	4.96%	4.80%
Employer (Normal Cost)	5.73%	5.57%	5.73%	5.57%
Employer (Plan 1 UAAL)	4.48%	3.61%	4.48%	3.61%
Total Employer	10.21%	9.18%	10.21%	9.18%
<b>SERS</b>				
Member*	N/A	N/A	4.64%	4.37%
Employer (Normal Cost)	N/A	N/A	5.64%	5.37%
Employer (PERS Plan 1 UAAL)	N/A	N/A	4.00%	3.39%
Total Employer	N/A	N/A	9.64%	8.76%
<b>PSERS</b>				
Member	N/A	N/A	6.22%	6.32%
Employer (Normal Cost)	N/A	N/A	6.22%	6.32%
Employer (PERS Plan 1 UAAL)	N/A	N/A	4.00%	3.39%
Total Employer	N/A	N/A	10.22%	9.71%
<b>LEOFF**</b>				
Member	0.00%	0.00%	7.57%	7.57%
Employer	0.00%	0.00%	4.54%	4.54%
State (Normal Cost)	0.00%	0.00%	3.03%	3.03%
State (Plan 1 UAAL)	0.00%	0.00%	0.00%	0.00%
Total State	0.00%	0.00%	3.03%	3.03%
<b>WSPRS</b>				
Member	6.31%	6.39%	6.31%	6.39%
Employer (State)	7.63%	7.71%	7.63%	7.71%

Note: Employer rates exclude administrative expense rate.

\*Plan 3 members do not contribute to the defined benefit plan.

\*\*Values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

Development of 2011 Employer/State Rates									
	PERS		TRS		SERS	PSERS	LEOFF		WSPRS
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 2	Plan 1	Plan 2	
a. Total Normal Cost	11.03%	9.95%	11.73%	10.69%	10.28%	12.44%	0.00%	15.14%	13.94%
b. Member Normal Cost*	6.00%	4.92%	6.00%	4.96%	4.64%	6.22%	0.00%	7.57%	6.31%
c. Employer Contribution (a-b)	5.03%	5.03%	5.73%	5.73%	5.64%	6.22%	0.00%	7.57%	7.63%
d. Cost to Amortize UAAL	4.00%	4.00%	4.48%	4.48%	4.00%	4.00%	0.00%	0.00%	N/A
e. Total Employer Rate (c+d)**	<b>9.03%</b>	<b>9.03%</b>	<b>10.21%</b>	<b>10.21%</b>	<b>9.64%</b>	<b>10.22%</b>	<b>0.00%</b>	<b>4.54%</b>	<b>7.63%</b>

Employer rates exclude administrative expense rate.

\*Plan 3 members do not contribute to the defined benefit plan.

\*\*The state pays 20% of the total normal cost for LEOFF 2. This reduces the total employer contribution rate from 7.57% to 4.54%.

TRRS Plan 2 Maximum Member Contribution Rates				
Valuation Year	Prior Max	Supplemental	Source	New Max
2011	8.64%	0.00%	N/A	8.64%
2010	8.63%	0.01%	C 5 L 11	8.64%
2009	8.63%	0.00%	N/A	8.63%
2008	8.63%	0.00%	N/A	8.63%
2007	8.55%	0.08%	C 101 L08	8.63%
2006	7.76%	0.79%	C 50 L 07	8.55%
2005	7.75%	0.01%	C 33 L 06	7.76%
2004	7.75%	0.00%	N/A	7.75%
2003	7.75%	0.00%	N/A	7.75%
2002	7.75%	0.00%	N/A	7.75%
2001	7.75%	0.00%	N/A	7.75%
2000	7.75%	0.00%	N/A	7.75%
1999	6.59%	1.16%	C 247 L 00	7.75%
1998	6.59%	0.00%	N/A	6.59%
1997	N/A	N/A	N/A	6.59%

*Note: Maximum member contribution rates change each year by 50% of the total supplemental contribution rates shown in the previous valuation.*

WSPRS Plan 1/2 Maximum Member Contribution Rates				
Valuation Year	Prior Max	Supplemental	Source	New Max
2011	7.19%	0.00%	N/A	7.19%
2010	7.19%	0.00%	N/A	7.19%
2009	7.18%	0.01%	C 261 L 10	7.19%
2008	6.95%	0.23%	C 522 L 09	7.18%
2007	6.95%	0.00%	N/A	6.95%
2006*	N/A	N/A	N/A	6.95%

*Note: Maximum member contribution rates change each year by 50% of the total supplemental contribution rates shown in the previous valuation.*

*\* The original maximum contribution rate of 7% was decreased by 0.05% for C 87 L 07.*

The following tables show the development of the normal cost rates. Consistent with current funding policy, the normal cost rates include minimum contribution rates to provide stable and adequate contribution rates over time. The minimum rates are a percent of the normal cost calculated under the Entry Age Normal (EAN) funding method. The percent varies by plan. Please see the **Glossary** for a more detailed explanation of EAN.

Development of Normal Cost Rates						
(Dollars in Millions)	PERS 2/3	TRS 2/3	SERS 2/3	PSERS 2	LEOFF 2	WSPRS
<b>1. Calculation of Member Normal Cost Rate</b>						
a. Future Value of Fully Projected Benefits	\$188,319	\$87,391	\$22,892	\$6,466	\$65,000	\$5,678
b. Present Value of Fully Projected Benefits	\$27,337	\$9,762	\$3,696	\$455	\$8,718	\$994
c. Valuation Assets	20,997	7,141	2,872	141	6,621	949
d. Unfunded Fully Projected Benefits (b - c)	6,340	2,621	824	314	2,097	44
e. Past Liability Balance	63	239	84	0	0	10
f. Adjusted Unfunded (d - e)	\$6,277	\$2,382	\$740	\$314	\$2,097	\$34
<b>Present Value of Projected Salaries to Current Members (PVS)</b>						
g. Plan 1 PVS	N/A	N/A	N/A	N/A	N/A	\$460
h. Plan 2 PVS	56,848	6,188	4,463	2,526	16,910	312
i. Plan 3 PVS	13,874	35,644	7,017	N/A	N/A	N/A
j. Weighted PVS (2g + 2h + i)	\$127,569	\$48,021	\$15,943	\$5,052	\$33,821	\$1,543
k. Employee Normal Cost (f / j)	4.92%	4.96%	4.64%	6.22%	6.20%	2.19%
l. Employee Minimum Contribution Rate	3.84%	4.64%	4.05%	5.79%	7.57%	6.31%
m. Prior Year Employee Maximum Contribution Rate <sup>1</sup>	N/A	8.64%	N/A	N/A	N/A	7.19%
n. Employee Contribution Rate with Max/Min	4.92%	4.96%	4.64%	6.22%	7.57%	6.31%
o. Change In Plan Provisions (Laws of 2012)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
p. Employee Contribution Rate (n + o) <sup>2</sup>	4.92%	4.96%	4.64%	6.22%	7.57%	6.31%
<b>2. Calculation of Employer Normal Cost Rate</b>						
a. Present Value of Fully Projected Benefits	\$27,337	\$9,762	\$3,696	\$455	\$8,718	\$994
b. Valuation Assets	20,997	7,141	2,872	141	6,621	949
c. Unfunded Benefits (a - b)	6,340	2,621	824	314	2,097	44
d. Present Value of Employee Contributions	2,797	307	207	157	1,049	17
e. Past Liability Balance	63	239	84	0	0	10
f. Employer Responsibility (c - d - e)	\$3,480	\$2,075	\$533	\$157	\$1,049	\$17
<b>Present Value of Projected Salaries to Current Members (PVS)</b>						
g. Plan 1 PVS	N/A	N/A	N/A	N/A	N/A	460
h. Plan 2 PVS	56,848	6,188	4,463	2,526	16,910	312
i. Plan 3 PVS	13,874	35,644	7,017	N/A	N/A	N/A
j. Total PVS (g + h + i)	\$70,721	\$41,833	\$11,480	\$2,526	\$16,910	\$772
k. Employer Normal Cost (f / j)	4.92%	4.96%	4.64%	6.22%	6.20%	2.19%
l. Employer Minimum Contribution Rate	3.84%	4.64%	4.05%	5.79%	7.57%	6.31%
m. Employer Contribution Rate with Minimum	4.92%	4.96%	4.64%	6.22%	7.57%	6.31%
n. Excess Employer Rate <sup>1</sup>	N/A	0.00%	N/A	N/A	N/A	0.00%
o. Rate to Amortize Past Liability Balance <sup>3</sup>	0.11%	0.77%	1.00%	N/A	N/A	1.32%
p. Change In Plan Provisions (Laws of 2012)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
q. Employer Contribution Rate (m + n + o + p)	5.03%	5.73%	5.64%	6.22%	7.57%	7.63%
<b>3. Normal Cost Rates Adopted for 2013-15<sup>4</sup></b>						
a. Employee Contribution Rate <sup>5</sup>	4.92%	4.96%	4.64%	6.36%	8.41%	6.59%
b. Employer Contribution Rate <sup>5</sup>	5.03%	5.73%	5.64%	6.36%	5.05%	7.91%
c. State Contribution Rate <sup>5</sup>	N/A	N/A	N/A	N/A	3.36%	N/A
d. Total Contribution Rate (a + b + c)	<b>9.95%</b>	<b>10.69%</b>	<b>10.28%</b>	<b>12.72%</b>	<b>16.82%</b>	<b>14.50%</b>

Note: Totals may not agree due to rounding.

<sup>1</sup> WSPRS and TRS 2 employees pay 50% of the total normal cost, not to exceed an adjusted cap. The employer pays the excess.

<sup>2</sup> Plan 3 members do not contribute to the defined benefit plan.

<sup>3</sup> WSPRS liability is attributable to past costs for improved survivor benefits. PERS, TRS, and SERS liability is attributable to past Plan 3 gain-sharing.

<sup>4</sup> LEOFF 2 rates adopted by LEOFF 2 Board; all others adopted by PFC.

<sup>5</sup> LEOFF 2 rate: 50% Employee, 30% Employer, 20% State.

<b>Amortization of the Plan 1 Unfunded Actuarial Accrued Liability (UAAL)</b>				
<i>(Dollars in Millions)</i>		<b>PERS 1</b>	<b>TRS 1</b>	<b>LEOFF 1</b>
a.	Future Value of Fully Projected Benefits	\$28,931	\$21,089	\$10,328
b.	Present Value of Fully Projected Benefits (PVFB)	\$12,722	\$9,313	\$4,150
c.	Valuation Assets	\$8,883	\$7,485	\$5,565
d.	Actuarial Present Value of Future Normal Costs	\$166	\$93	\$0
e.	Balance of Plan 1 Benefit Improvements After 2009	\$136	\$61	N/A
f.	UAAL (b - c - d -e)	\$3,537	\$1,675	(\$1,415)
g.	Expected UAAL Contributions to 2013	N/A	N/A	\$0
h.	Remaining UAAL (f - g)	\$3,537	\$1,675	(\$1,415)
i.	Amortization Date	N/A	N/A	6/30/2024
j.	Present Value of Projected Salaries*	\$91,727	\$38,709	\$14,911
k.	Contribution Rate Before Adjustments (h / j)	3.86%	4.33%	(9.49%)
l.	Minimum Contribution Rate	0.00%	0.00%	N/A
m.	Maximum Contribution Rate, 2013-2014**	5.25%	8.50%	N/A
n.	Preliminary Contribution Rate***	3.86%	4.33%	(9.49%)
o.	Plan 1 Benefit Improvements After 2009	0.14%	0.15%	N/A
p.	Change In Plan Provisions (Laws of 2012)	0.00%	0.00%	0.00%
q.	Contribution Rate to Amortize the UAAL (n + o + p)***	4.00%	4.48%	(9.49%)
<b>Plan 1 UAAL Contribution Rates Adopted by PFC</b>				
Contribution Rate Adopted for 2013-15		4.00%	4.48%	0.00%

Note: Totals may not agree due to rounding.

\*Measured under the plan's amortization method.

\*\*Maximum rates in 2014-2015 are: PERS 1 = 6.00%, TRS 1 = 9.50%.

\*\*\*No LEOFF 1 UAAL contributions are required when the plan is fully funded under current methods and assumptions.

# Actuarial Liabilities

Present Value of Fully Projected Benefits						
(Dollars in Millions)	PERS			TRS		
	Plan 1	Plan 2/3	Total	Plan 1	Plan 2/3	Total
<b>Active Members</b>						
Retirement	\$1,988	\$20,134	\$22,121	\$1,355	\$7,927	\$9,282
Termination	5	662	666	1	211	212
Death	16	188	203	7	69	76
Disability	4	131	136	0	8	9
Return of Contributions on Termination	2	276	278	0	14	14
Return of Contributions on Death	30	190	220	15	17	32
<b>Total Active</b>	<b>\$2,045</b>	<b>\$21,580</b>	<b>\$23,624</b>	<b>\$1,379</b>	<b>\$8,245</b>	<b>\$9,624</b>
<b>Inactive Members</b>						
Terminated	\$196	\$1,871	\$2,067	\$74	\$600	\$675
Service Retired	9,757	3,629	13,387	7,450	880	8,330
Disability Retired	127	102	229	87	10	97
Survivors	596	155	752	323	26	348
<b>Total Inactive</b>	<b>\$10,678</b>	<b>\$5,757</b>	<b>\$16,434</b>	<b>\$7,934</b>	<b>\$1,516</b>	<b>\$9,450</b>
<b>Laws of 2012</b>	<b>0</b>	<b>(1)</b>	<b>(1)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2011 Total</b>	<b>\$12,722</b>	<b>\$27,336</b>	<b>\$40,058</b>	<b>\$9,313</b>	<b>\$9,762</b>	<b>\$19,075</b>
<b>2010 Total</b>	<b>\$12,721</b>	<b>\$26,041</b>	<b>\$38,762</b>	<b>\$9,305</b>	<b>\$9,111</b>	<b>\$18,416</b>

Notes: Totals may not agree due to rounding.

Present Value of Fully Projected Benefits							
(Continued)							
(Dollars in Millions)	SERS		PSERS		LEOFF		WSPRS
	Plan 2/3	Plan 2	Plan 1	Plan 2	Total		
<b>Active Members</b>							
Retirement	\$2,602	\$394	\$248	\$6,832	\$7,080	\$442	
Termination	150	27	0	90	90	3	
Death	31	2	2	65	67	4	
Disability	13	2	1	402	403	2	
Return of Contributions on Termination	22	18	0	79	79	2	
Return of Contributions on Death	16	4	0	84	84	1	
<b>Total Active</b>	<b>\$2,834</b>	<b>\$449</b>	<b>\$252</b>	<b>\$7,552</b>	<b>\$7,804</b>	<b>\$453</b>	
<b>Inactive Members</b>							
Terminated	\$333	\$6	\$1	\$130	\$131	\$9	
Service Retired	503	0	1,666	901	2,567	490	
Disability Retired	11	0	1,745	84	1,829	6	
Survivors	14	0	487	50	537	37	
<b>Total Inactive</b>	<b>\$862</b>	<b>\$6</b>	<b>\$3,899</b>	<b>\$1,166</b>	<b>\$5,065</b>	<b>\$541</b>	
<b>Laws of 2012</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	
<b>2011 Total</b>	<b>\$3,696</b>	<b>\$455</b>	<b>\$4,150</b>	<b>\$8,720</b>	<b>\$12,870</b>	<b>\$994</b>	
<b>2010 Total*</b>	<b>\$3,461</b>	<b>\$425</b>	<b>\$4,401</b>	<b>\$8,204</b>	<b>\$12,605</b>	<b>\$954</b>	

Note: Totals may not agree due to rounding.

\*LEOFF 2 values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

Present Value of Accrued (Earned) Benefits*						
(Dollars in Millions)	PERS			TRS		
	Plan 1	Plan 2/3	Total	Plan 1	Plan 2/3	Total
<b>Active Members</b>						
Retirement	\$1,838	\$12,220	\$14,058	\$1,301	\$4,604	\$5,905
Termination	4	394	398	1	118	119
Death	15	117	133	7	41	48
Disability	4	79	83	0	5	5
Return of Contributions on Termination	2	142	143	0	6	6
Return of Contributions on Death	27	106	133	14	10	23
<b>Total Active</b>	<b>\$1,889</b>	<b>\$13,058</b>	<b>\$14,948</b>	<b>\$1,324</b>	<b>\$4,782</b>	<b>\$6,106</b>
<b>Inactive Members</b>						
Terminated	\$196	\$1,871	\$2,067	\$74	\$600	\$675
Service Retired	9,757	3,629	13,387	7,450	880	8,330
Disability Retired	127	102	229	87	10	97
Survivors	596	155	752	323	26	348
<b>Total Inactive</b>	<b>\$10,678</b>	<b>\$5,757</b>	<b>\$16,434</b>	<b>\$7,934</b>	<b>\$1,516</b>	<b>\$9,450</b>
<b>Laws of 2012</b>	<b>0</b>	<b>(0)</b>	<b>(0)</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>2011 Total</b>	<b>\$12,567</b>	<b>\$18,815</b>	<b>\$31,382</b>	<b>\$9,258</b>	<b>\$6,299</b>	<b>\$15,557</b>
<b>2010 Total</b>	<b>\$12,531</b>	<b>\$17,272</b>	<b>\$29,803</b>	<b>\$9,231</b>	<b>\$5,708</b>	<b>\$14,938</b>

Note: Totals may not agree due to rounding.

\*Calculated using the Projected Unit Credit (PUC) cost method. This method was not used to determine contribution requirements.

Present Value of Accrued (Earned) Benefits*							
(Continued)							
(Dollars in Millions)	SERS		PSERS		LEOFF		WSPRS
	Plan 2/3	Plan 2	Plan 1	Plan 2	Total		
<b>Active Members</b>							
Retirement	\$1,603	\$80	\$233	\$3,962	\$4,195	\$279	
Termination	92	9	0	53	53	2	
Death	20	1	2	46	48	4	
Disability	8	1	1	254	255	2	
Return of Contributions on Termination	12	9	0	46	46	1	
Return of Contributions on Death	10	1	0	48	48	1	
<b>Total Active</b>	<b>\$1,745</b>	<b>\$101</b>	<b>\$236</b>	<b>\$4,409</b>	<b>\$4,646</b>	<b>\$288</b>	
<b>Inactive Members</b>							
Terminated	\$333	\$6	\$1	\$130	\$131	\$9	
Service Retired	503	0	1,666	901	2,567	490	
Disability Retired	11	0	1,745	84	1,829	6	
Survivors	14	0	487	50	537	37	
<b>Total Inactive</b>	<b>\$862</b>	<b>\$6</b>	<b>\$3,899</b>	<b>\$1,166</b>	<b>\$5,065</b>	<b>\$541</b>	
<b>Laws of 2012</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	
<b>2011 Total</b>	<b>\$2,607</b>	<b>\$107</b>	<b>\$4,135</b>	<b>\$5,576</b>	<b>\$9,711</b>	<b>\$829</b>	
<b>2010 Total**</b>	<b>\$2,368</b>	<b>\$80</b>	<b>\$4,381</b>	<b>\$5,078</b>	<b>\$9,459</b>	<b>\$782</b>	

Note: Totals may not agree due to rounding.

\*Calculated using the Projected Unit Credit (PUC) cost method. This method was not used to determine contribution requirements.

\*\*LEOFF 2 values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

Fully Projected Benefit Payments					
PERS - Plan 1					
<i>(Dollars in Millions)</i>	Future	Present	Year	Future	Present
Year	Value	Value	Year	Value	Value
2011	\$1,220	\$1,174	2061	\$5	\$0
2012	1,235	1,101	2062	4	0
2013	1,243	1,028	2063	4	0
2014	1,243	953	2064	3	0
2015	1,238	879	2065	3	0
2016	1,231	810	2066	2	0
2017	1,217	742	2067	2	0
2018	1,197	677	2068	2	0
2019	1,173	615	2069	2	0
2020	1,145	556	2070	1	0
2021	1,114	501	2071	1	0
2022	1,080	451	2072	1	0
2023	1,046	404	2073	1	0
2024	1,010	362	2074	1	0
2025	972	323	2075	1	0
2026	934	287	2076	1	0
2027	894	255	2077	1	0
2028	853	226	2078	0	0
2029	812	199	2079	0	0
2030	771	175	2080	0	0
2031	729	153	2081	0	0
2032	688	134	2082	0	0
2033	646	117	2083	0	0
2034	603	101	2084	0	0
2035	560	87	2085	0	0
2036	516	74	2086	0	0
2037	472	63	2087	0	0
2038	429	53	2088	0	0
2039	386	44	2089	0	0
2040	344	37	2090	0	0
2041	304	30	2091	0	0
2042	266	24	2092	0	0
2043	231	19	2093	0	0
2044	198	15	2094	0	0
2045	168	12	2095	0	0
2046	141	9	2096	0	0
2047	117	7	2097	0	0
2048	97	6	2098	0	0
2049	79	4	2099	0	0
2050	64	3	2100	0	0
2051	52	2	2101	0	0
2052	41	2	2102	0	0
2053	33	1	2103	0	0
2054	26	1	2104	0	0
2055	21	1	2105	0	0
2056	16	1	2106	0	0
2057	13	0	2107	0	0
2058	10	0	2108	0	0
2059	8	0	2109	0	0
2060	\$7	\$0	2110	\$0	\$0
			<b>Total</b>	<b>\$28,931</b>	<b>\$12,722</b>

Fully Projected Benefit Payments					
PERS - Plan 2/3					
(Dollars in Millions)	Future Value	Present Value	Year	Future Value	Present Value
2011	\$495	\$477	2061	\$2,482	\$53
2012	572	510	2062	2,307	46
2013	683	565	2063	2,136	39
2014	809	620	2064	1,968	34
2015	951	675	2065	1,804	29
2016	1,102	725	2066	1,646	24
2017	1,258	767	2067	1,493	20
2018	1,429	808	2068	1,346	17
2019	1,606	841	2069	1,206	14
2020	1,796	872	2070	1,073	12
2021	1,988	895	2071	948	10
2022	2,175	907	2072	831	8
2023	2,367	915	2073	723	6
2024	2,564	919	2074	623	5
2025	2,758	916	2075	532	4
2026	2,948	907	2076	451	3
2027	3,131	893	2077	378	2
2028	3,311	875	2078	314	2
2029	3,486	854	2079	257	1
2030	3,646	828	2080	209	1
2031	3,807	801	2081	168	1
2032	3,963	773	2082	134	1
2033	4,141	748	2083	105	0
2034	4,311	722	2084	81	0
2035	4,418	686	2085	63	0
2036	4,508	649	2086	48	0
2037	4,607	614	2087	36	0
2038	4,720	583	2088	27	0
2039	4,803	550	2089	19	0
2040	4,841	514	2090	13	0
2041	4,867	479	2091	10	0
2042	4,884	445	2092	7	0
2043	4,903	414	2093	5	0
2044	4,900	384	2094	3	0
2045	4,844	352	2095	2	0
2046	4,771	321	2096	1	0
2047	4,684	292	2097	1	0
2048	4,583	265	2098	0	0
2049	4,468	239	2099	0	0
2050	4,338	215	2100	0	0
2051	4,195	193	2101	0	0
2052	4,041	172	2102	0	0
2053	3,880	153	2103	0	0
2054	3,714	136	2104	0	0
2055	3,542	120	2105	0	0
2056	3,368	106	2106	0	0
2057	3,191	93	2107	0	0
2058	3,013	81	2108	0	0
2059	2,836	71	2109	0	0
2060	\$2,658	\$62	2110	\$0	\$0
			<b>Total</b>	<b>\$188,319</b>	<b>\$27,336</b>

Fully Projected Benefit Payments					
TRIS - Plan 1					
<i>(Dollars in Millions)</i>	Future	Present		Future	Present
Year	Value	Value	Year	Value	Value
2011	\$888	\$855	2061	\$3	\$0
2012	908	810	2062	2	0
2013	919	760	2063	2	0
2014	922	707	2064	2	0
2015	919	653	2065	2	0
2016	910	599	2066	1	0
2017	897	547	2067	1	0
2018	880	497	2068	1	0
2019	860	450	2069	1	0
2020	837	406	2070	1	0
2021	812	366	2071	1	0
2022	786	328	2072	1	0
2023	759	293	2073	1	0
2024	731	262	2074	1	0
2025	702	233	2075	1	0
2026	672	207	2076	1	0
2027	642	183	2077	1	0
2028	612	162	2078	0	0
2029	581	142	2079	0	0
2030	551	125	2080	0	0
2031	522	110	2081	0	0
2032	493	96	2082	0	0
2033	464	84	2083	0	0
2034	435	73	2084	0	0
2035	406	63	2085	0	0
2036	376	54	2086	0	0
2037	346	46	2087	0	0
2038	316	39	2088	0	0
2039	285	33	2089	0	0
2040	255	27	2090	0	0
2041	226	22	2091	0	0
2042	198	18	2092	0	0
2043	171	14	2093	0	0
2044	146	11	2094	0	0
2045	124	9	2095	0	0
2046	104	7	2096	0	0
2047	86	5	2097	0	0
2048	70	4	2098	0	0
2049	57	3	2099	0	0
2050	45	2	2100	0	0
2051	36	2	2101	0	0
2052	29	1	2102	0	0
2053	22	1	2103	0	0
2054	17	1	2104	0	0
2055	13	0	2105	0	0
2056	10	0	2106	0	0
2057	8	0	2107	0	0
2058	6	0	2108	0	0
2059	5	0	2109	0	0
2060	\$4	\$0	2110	\$0	\$0
			<b>Total</b>	<b>\$21,089</b>	<b>\$9,313</b>

Fully Projected Benefit Payments					
TRS - Plan 2/3					
<i>(Dollars in Millions)</i>	Future	Present		Future	Present
Year	Value	Value	Year	Value	Value
2011	\$113	\$109	2061	\$1,548	\$33
2012	136	121	2062	1,466	29
2013	175	145	2063	1,382	26
2014	219	168	2064	1,297	22
2015	265	188	2065	1,212	19
2016	315	207	2066	1,125	17
2017	367	224	2067	1,040	14
2018	422	239	2068	954	12
2019	479	251	2069	871	10
2020	540	262	2070	789	9
2021	604	272	2071	709	7
2022	662	276	2072	633	6
2023	729	282	2073	559	5
2024	801	287	2074	490	4
2025	871	289	2075	426	3
2026	942	290	2076	366	3
2027	1,014	289	2077	311	2
2028	1,091	288	2078	262	2
2029	1,166	286	2079	217	1
2030	1,243	282	2080	178	1
2031	1,327	279	2081	145	1
2032	1,403	274	2082	117	1
2033	1,489	269	2083	93	0
2034	1,593	267	2084	73	0
2035	1,668	259	2085	56	0
2036	1,741	250	2086	43	0
2037	1,818	242	2087	33	0
2038	1,897	234	2088	24	0
2039	1,991	228	2089	17	0
2040	2,060	219	2090	12	0
2041	2,121	209	2091	9	0
2042	2,175	198	2092	6	0
2043	2,223	188	2093	4	0
2044	2,270	178	2094	2	0
2045	2,286	166	2095	1	0
2046	2,290	154	2096	1	0
2047	2,290	143	2097	0	0
2048	2,281	132	2098	0	0
2049	2,261	121	2099	0	0
2050	2,232	111	2100	0	0
2051	2,194	101	2101	0	0
2052	2,149	92	2102	0	0
2053	2,098	83	2103	0	0
2054	2,043	75	2104	0	0
2055	1,982	67	2105	0	0
2056	1,918	60	2106	0	0
2057	1,850	54	2107	0	0
2058	1,779	48	2108	0	0
2059	1,705	43	2109	0	0
2060	\$1,628	\$38	2110	\$0	\$0
			<b>Total</b>	<b>\$87,391</b>	<b>\$9,762</b>

Fully Projected Benefit Payments					
SERS - Plan 2/3					
<i>(Dollars in Millions)</i>	Future	Present		Future	Present
Year	Value	Value	Year	Value	Value
2011	\$60	\$58	2061	\$240	\$5
2012	76	68	2062	220	4
2013	93	77	2063	202	4
2014	111	85	2064	185	3
2015	131	93	2065	168	3
2016	153	101	2066	153	2
2017	176	107	2067	138	2
2018	203	115	2068	124	2
2019	230	121	2069	111	1
2020	258	126	2070	99	1
2021	287	129	2071	88	1
2022	316	132	2072	78	1
2023	345	133	2073	68	1
2024	376	135	2074	59	0
2025	404	134	2075	51	0
2026	430	132	2076	44	0
2027	454	130	2077	38	0
2028	477	126	2078	32	0
2029	500	123	2079	27	0
2030	521	118	2080	22	0
2031	538	113	2081	18	0
2032	554	108	2082	15	0
2033	574	104	2083	12	0
2034	588	98	2084	9	0
2035	596	92	2085	7	0
2036	600	86	2086	6	0
2037	605	81	2087	5	0
2038	612	76	2088	3	0
2039	614	70	2089	3	0
2040	611	65	2090	2	0
2041	606	60	2091	1	0
2042	600	55	2092	1	0
2043	596	50	2093	1	0
2044	586	46	2094	0	0
2045	573	42	2095	0	0
2046	557	37	2096	0	0
2047	541	34	2097	0	0
2048	524	30	2098	0	0
2049	504	27	2099	0	0
2050	484	24	2100	0	0
2051	462	21	2101	0	0
2052	440	19	2102	0	0
2053	417	16	2103	0	0
2054	393	14	2104	0	0
2055	370	13	2105	0	0
2056	347	11	2106	0	0
2057	324	9	2107	0	0
2058	302	8	2108	0	0
2059	280	7	2109	0	0
2060	\$260	\$6	2110	\$0	\$0
			<b>Total</b>	<b>\$22,892</b>	<b>\$3,696</b>

Fully Projected Benefit Payments					
PSERS - Plan 2					
<i>(Dollars in Millions)</i>	Future	Present		Future	Present
Year	Value	Value	Year	Value	Value
2011	\$3	\$3	2061	\$154	\$3
2012	3	2	2062	147	3
2013	3	2	2063	140	3
2014	3	2	2064	132	2
2015	3	2	2065	124	2
2016	4	3	2066	116	2
2017	5	3	2067	108	1
2018	6	3	2068	99	1
2019	7	4	2069	90	1
2020	9	4	2070	82	1
2021	11	5	2071	73	1
2022	15	6	2072	65	1
2023	18	7	2073	57	0
2024	21	8	2074	50	0
2025	25	8	2075	42	0
2026	29	9	2076	36	0
2027	33	10	2077	30	0
2028	38	10	2078	25	0
2029	46	11	2079	20	0
2030	52	12	2080	16	0
2031	58	12	2081	12	0
2032	66	13	2082	10	0
2033	74	13	2083	7	0
2034	82	14	2084	5	0
2035	89	14	2085	4	0
2036	96	14	2086	3	0
2037	103	14	2087	2	0
2038	113	14	2088	1	0
2039	122	14	2089	1	0
2040	131	14	2090	1	0
2041	139	14	2091	0	0
2042	149	14	2092	0	0
2043	158	13	2093	0	0
2044	166	13	2094	0	0
2045	174	13	2095	0	0
2046	180	12	2096	0	0
2047	186	12	2097	0	0
2048	190	11	2098	0	0
2049	193	10	2099	0	0
2050	194	10	2100	0	0
2051	194	9	2101	0	0
2052	193	8	2102	0	0
2053	191	8	2103	0	0
2054	189	7	2104	0	0
2055	186	6	2105	0	0
2056	182	6	2106	0	0
2057	177	5	2107	0	0
2058	172	5	2108	0	0
2059	167	4	2109	0	0
2060	\$161	\$4	2110	\$0	\$0
			<b>Total</b>	<b>\$6,466</b>	<b>\$455</b>

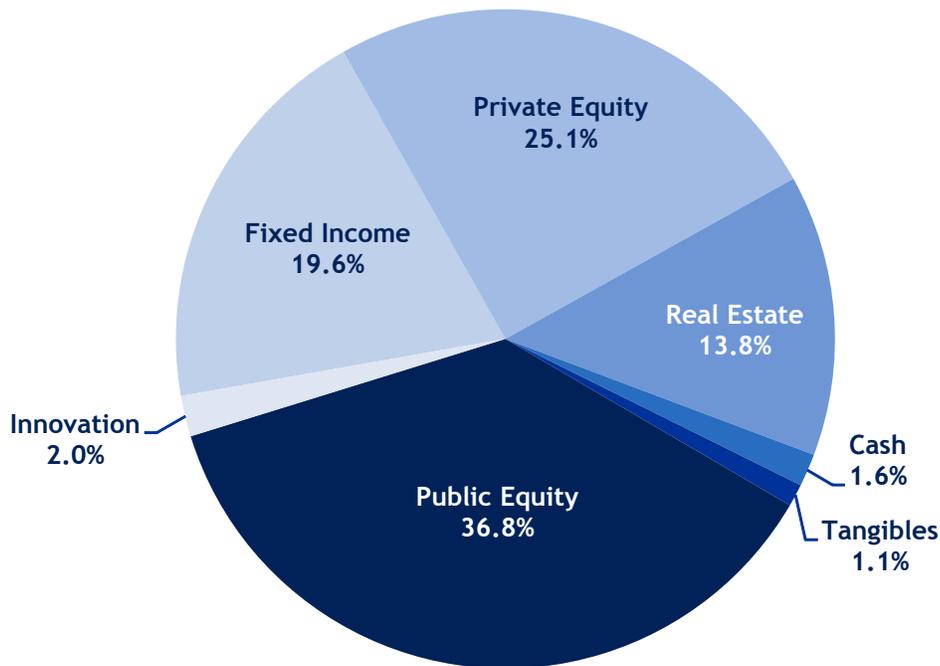
Fully Projected Benefit Payments					
LEOFF - Plan 1					
<i>(Dollars in Millions)</i>	Future	Present		Future	Present
Year	Value	Value	Year	Value	Value
2011	\$343	\$330	2061	\$1	\$0
2012	352	314	2062	1	0
2013	360	297	2063	1	0
2014	365	280	2064	1	0
2015	370	263	2065	0	0
2016	374	246	2066	0	0
2017	376	230	2067	0	0
2018	377	213	2068	0	0
2019	378	198	2069	0	0
2020	377	183	2070	0	0
2021	376	169	2071	0	0
2022	373	156	2072	0	0
2023	370	143	2073	0	0
2024	365	131	2074	0	0
2025	360	119	2075	0	0
2026	353	109	2076	0	0
2027	346	99	2077	0	0
2028	337	89	2078	0	0
2029	326	80	2079	0	0
2030	315	72	2080	0	0
2031	302	64	2081	0	0
2032	289	56	2082	0	0
2033	274	49	2083	0	0
2034	258	43	2084	0	0
2035	241	37	2085	0	0
2036	224	32	2086	0	0
2037	206	27	2087	0	0
2038	188	23	2088	0	0
2039	170	19	2089	0	0
2040	152	16	2090	0	0
2041	134	13	2091	0	0
2042	118	11	2092	0	0
2043	102	9	2093	0	0
2044	88	7	2094	0	0
2045	74	5	2095	0	0
2046	62	4	2096	0	0
2047	52	3	2097	0	0
2048	42	2	2098	0	0
2049	35	2	2099	0	0
2050	28	1	2100	0	0
2051	22	1	2101	0	0
2052	17	1	2102	0	0
2053	14	1	2103	0	0
2054	11	0	2104	0	0
2055	8	0	2105	0	0
2056	6	0	2106	0	0
2057	5	0	2107	0	0
2058	4	0	2108	0	0
2059	3	0	2109	0	0
2060	\$2	\$0	2110	\$0	\$0
			<b>Total</b>	<b>\$10,328</b>	<b>\$4,150</b>

Fully Projected Benefit Payments					
LEOFF - Plan 2					
(Dollars in Millions)	Future	Present		Future	Present
Year	Value	Value	Year	Value	Value
2011	\$96	\$93	2061	\$1,008	\$26
2012	123	110	2062	933	23
2013	153	128	2063	859	19
2014	186	144	2064	786	16
2015	222	160	2065	714	14
2016	261	175	2066	645	12
2017	301	188	2067	577	10
2018	344	200	2068	513	8
2019	391	212	2069	452	7
2020	440	221	2070	394	5
2021	491	230	2071	340	4
2022	548	238	2072	291	3
2023	609	246	2073	246	3
2024	672	253	2074	205	2
2025	737	258	2075	169	2
2026	804	262	2076	137	1
2027	875	265	2077	110	1
2028	947	267	2078	87	1
2029	1,020	268	2079	67	0
2030	1,094	267	2080	51	0
2031	1,166	265	2081	39	0
2032	1,239	262	2082	29	0
2033	1,311	258	2083	21	0
2034	1,380	252	2084	15	0
2035	1,446	246	2085	10	0
2036	1,508	238	2086	7	0
2037	1,565	230	2087	5	0
2038	1,619	222	2088	3	0
2039	1,668	212	2089	2	0
2040	1,707	202	2090	1	0
2041	1,739	192	2091	1	0
2042	1,764	181	2092	1	0
2043	1,781	170	2093	0	0
2044	1,791	159	2094	0	0
2045	1,790	148	2095	0	0
2046	1,781	137	2096	0	0
2047	1,766	126	2097	0	0
2048	1,745	116	2098	0	0
2049	1,717	106	2099	0	0
2050	1,681	97	2100	0	0
2051	1,639	88	2101	0	0
2052	1,593	79	2102	0	0
2053	1,542	71	2103	0	0
2054	1,485	64	2104	0	0
2055	1,426	57	2105	0	0
2056	1,363	51	2106	0	0
2057	1,296	45	2107	0	0
2058	1,226	40	2108	0	0
2059	1,155	35	2109	0	0
2060	\$1,082	\$30	2110	\$0	\$0
			<b>Total</b>	<b>\$65,000</b>	<b>\$8,720</b>

Fully Projected Benefit Payments					
WSPRS - Plan 1/2					
<i>(Dollars in Millions)</i>	Future	Present		Future	Present
Year	Value	Value	Year	Value	Value
2011	\$41	\$40	2061	\$74	\$2
2012	44	39	2062	69	1
2013	46	38	2063	63	1
2014	49	38	2064	57	1
2015	52	37	2065	52	1
2016	56	37	2066	47	1
2017	60	36	2067	41	1
2018	63	36	2068	37	0
2019	67	35	2069	32	0
2020	71	34	2070	28	0
2021	74	33	2071	24	0
2022	78	33	2072	20	0
2023	83	32	2073	17	0
2024	87	31	2074	14	0
2025	91	30	2075	12	0
2026	95	29	2076	10	0
2027	99	28	2077	8	0
2028	103	27	2078	6	0
2029	107	26	2079	5	0
2030	110	25	2080	4	0
2031	114	24	2081	3	0
2032	117	23	2082	2	0
2033	121	22	2083	1	0
2034	124	21	2084	1	0
2035	127	20	2085	1	0
2036	129	19	2086	1	0
2037	131	17	2087	0	0
2038	132	16	2088	0	0
2039	133	15	2089	0	0
2040	133	14	2090	0	0
2041	133	13	2091	0	0
2042	133	12	2092	0	0
2043	133	11	2093	0	0
2044	132	10	2094	0	0
2045	132	10	2095	0	0
2046	130	9	2096	0	0
2047	129	8	2097	0	0
2048	127	7	2098	0	0
2049	125	7	2099	0	0
2050	122	6	2100	0	0
2051	120	6	2101	0	0
2052	117	5	2102	0	0
2053	113	4	2103	0	0
2054	109	4	2104	0	0
2055	105	4	2105	0	0
2056	101	3	2106	0	0
2057	96	3	2107	0	0
2058	91	2	2108	0	0
2059	85	2	2109	0	0
2060	\$80	\$2	2110	\$0	\$0
			<b>Total</b>	<b>\$5,678</b>	<b>\$994</b>

# Plan Assets

## Retirement Commingled Trust Fund (CTF) Asset Allocation



**Cash:** Highly liquid, very safe investments that can be easily converted into cash, such as Treasury Bills and money-market funds.

**Fixed Income:** Securities representing debt obligations and usually having fixed payments and maturities. Different types of fixed income securities include government and corporate bonds, mortgage-backed securities, asset-backed securities, convertible issues, and may also include money-market instruments.

**Innovation:** Fund that provides the ability to invest in a broad range of assets that fall outside the traditional asset classes or management style of existing asset classes.

**Public Equity:** Shares of U.S. and non-U.S. corporations that trade on public exchanges or “over-the-counter.” The ownership of a corporation is represented by shares that are claimed on the corporation’s earnings and assets.

**Private Equity:** The infusion of equity capital into a private company (one that is not available on the public markets). Private equity investments include securities that are not listed on a public exchange and are not easily accessible to most individuals. These investments range from initial capital in start-up enterprises to leveraged buyouts of mature corporations.

**Real Estate:** An externally-managed selection of partnership investments with the majority of the partnerships invested in high-quality real estate leased to third parties.

**Tangibles:** The tangible asset portfolio invests in sectors such as infrastructure, timber, agriculture, natural resources, commodities, or other sectors consistent with the goals of the asset class.

Change in Market Value of Assets						
<i>(Dollars in Millions)</i>	PERS			TRS		
	Plan 1	Plan 2/3*		Plan 1	Plan 2/3*	
	Fund 631	Fund 641	Total	Fund 632	Fund 642	Total
<b>2010 Market Value</b>	<b>\$7,624</b>	<b>\$16,367</b>	<b>\$23,991</b>	<b>\$6,402</b>	<b>\$5,547</b>	<b>\$11,949</b>
<b>Revenue</b>						
<b>Contributions</b>						
Employee	29	264	293	18	22	40
Employer/State	146	328	474	97	168	265
<b>Total Contributions</b>	<b>174</b>	<b>592</b>	<b>766</b>	<b>114</b>	<b>190</b>	<b>305</b>
Investment Return	1,523	3,468	4,992	1,280	1,175	2,455
Restorations	10	18	28	8	1	9
Transfers In	0	4	4	0	1	1
Miscellaneous	0	(0)	(0)	0	(0)	(0)
<b>Total Revenue</b>	<b>\$1,707</b>	<b>\$4,083</b>	<b>\$5,790</b>	<b>\$1,402</b>	<b>\$1,367</b>	<b>\$2,769</b>
<b>Disbursements</b>						
Monthly Benefits**	\$1,150	\$311	\$1,460	\$900	\$72	\$972
Refunds	3	34	37	2	2	4
<b>Total Benefits</b>	<b>1,153</b>	<b>345</b>	<b>1,498</b>	<b>902</b>	<b>74</b>	<b>976</b>
Transfers Out	0	8	8	0	0	0
Expenses	0	1	1	0	0	0
<b>Total Disbursements</b>	<b>\$1,154</b>	<b>\$353</b>	<b>\$1,507</b>	<b>\$902</b>	<b>\$75</b>	<b>\$977</b>
<b>Payables</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>2011 Market Value</b>	<b>\$8,178</b>	<b>\$20,097</b>	<b>\$28,274</b>	<b>\$6,902</b>	<b>\$6,839</b>	<b>\$13,741</b>
<b>2011 Actuarial Value</b>	<b>\$8,883</b>	<b>\$20,997</b>	<b>\$29,880</b>	<b>\$7,485</b>	<b>\$7,141</b>	<b>\$14,626</b>
<b>Ratio (AV/MV)</b>	<b>109%</b>	<b>104%</b>	<b>106%</b>	<b>108%</b>	<b>104%</b>	<b>106%</b>

Note: Totals may not agree due to rounding.

\*Defined Benefit portion only.

\*\*TRS Plan 1 value includes annuity cashouts.

Change in Market Value of Assets (Continued)							
(Dollars in Millions)	SERS	PSERS	LEOFF		WSPRS	Total	
	Plan 2/3*	Plan 2	Plan 1	Plan 2			
	Fund 633	Fund 635	Fund 819	Fund 829	Total	Fund 615	
<b>2010 Market Value</b>	<b>\$2,237</b>	<b>\$93</b>	<b>\$4,585</b>	<b>\$5,081</b>	<b>\$9,667</b>	<b>\$764</b>	<b>\$48,700</b>
<b>Revenue</b>							
<b>Contributions</b>							
Employee	19	15	0	131	131	4	502
Employer/State	62	16	0	132	132	5	954
<b>Total Contributions</b>	<b>82</b>	<b>31</b>	<b>0</b>	<b>263</b>	<b>263</b>	<b>9</b>	<b>1,456</b>
Investment Return	473	21	938	1,084	2,022	159	10,121
Restorations	0	0	1	5	6	1	45
Transfers In	0	0	0	3	3	0	9
Miscellaneous	(0)	0	0	0	0	0	(0)
<b>Total Revenue</b>	<b>\$555</b>	<b>\$52</b>	<b>\$939</b>	<b>\$1,355</b>	<b>\$2,294</b>	<b>\$169</b>	<b>\$11,631</b>
<b>Disbursements</b>							
Monthly Benefits	43	0	339	62	401	38	2,915
Refunds	2	2	0	8	8	0	54
<b>Total Benefits</b>	<b>46</b>	<b>2</b>	<b>339</b>	<b>70</b>	<b>409</b>	<b>39</b>	<b>2,969</b>
Transfers Out	0	0	0	0	0	0	9
Expenses	0	0	0	1	1	0	3
<b>Total Disbursements</b>	<b>\$46</b>	<b>\$2</b>	<b>\$339</b>	<b>\$71</b>	<b>\$410</b>	<b>\$39</b>	<b>\$2,980</b>
<b>Payables</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>2011 Market Value</b>	<b>\$2,746</b>	<b>\$143</b>	<b>\$5,185</b>	<b>\$6,366</b>	<b>\$11,550</b>	<b>\$895</b>	<b>\$57,350</b>
<b>2011 Actuarial Value</b>	<b>\$2,872</b>	<b>\$141</b>	<b>\$5,565</b>	<b>\$6,621</b>	<b>\$12,186</b>	<b>\$949</b>	<b>\$60,654</b>
<b>Ratio (AV/MV)</b>	<b>105%</b>	<b>98%</b>	<b>107%</b>	<b>104%</b>	<b>106%</b>	<b>106%</b>	<b>106%</b>

Note: Totals may not agree due to rounding.

\*Defined Benefit portion only.

Calculation of Actuarial Value of Assets							
<i>(Dollars in Millions)</i>		PERS 1	PERS 2/3*	TRS 1	TRS 2/3*	SERS 2/3*	
a.	Market Value at 6/30/2011	\$8,178	\$20,097	\$6,902	\$6,839	\$2,746	
b.	Deferred Gains and (Losses)						
Plan Year Ending	Years Deferred	Years Remaining					
6/30/2011	8	7	\$835	\$1,889	\$701	\$641	\$258
6/30/2010	6	4	275	487	226	164	67
6/30/2009	8	5	(1,997)	(3,428)	(1,667)	(1,167)	(474)
6/30/2008	8	4	(506)	(820)	(424)	(283)	(115)
6/30/2007	8	3	400	595	338	210	85
9/30/2006	8	2	183	248	154	87	35
9/30/2005	8	1	104	129	88	45	18
Total Deferral			(\$706)	(\$900)	(\$583)	(\$301)	(\$126)
c.	Market Value less Deferral (a-b)	\$8,883	\$20,997	\$7,485	\$7,141	\$2,872	
d.	70% of Market Value of Assets	\$5,724	\$14,068	\$4,831	\$4,787	\$1,922	
e.	130% of Market Value of Assets	\$10,631	\$26,126	\$8,973	\$8,891	\$3,570	
f.	<b>Actuarial Value of Assets**</b>	<b>\$8,883</b>	<b>\$20,997</b>	<b>\$7,485</b>	<b>\$7,141</b>	<b>\$2,872</b>	

Note: Totals may not agree due to rounding.

\*Defined Benefit portion only.

\*\*Actuarial Value of Assets can never be less than 70% or greater than 130% of the market value of assets.

Calculation of Actuarial Value of Assets (Continued)							
(Dollars in Millions)		PSERS 2	LEOFF 1	LEOFF 2	WSPRS	Total	
a.	Market Value at 6/30/2011	\$143	\$5,185	\$6,366	\$895	\$57,350	
b.	Deferred Gains and (Losses)						
Plan Year Ending	Years Deferred	Years Remaining					
6/30/2011	8	7	\$11	\$513	\$612	\$87	\$5,547
6/30/2010	3, 5, 6*	1, 3, 4*	1	156	131	25	1,531
6/30/2009	8	5	(8)	(1,139)	(1,033)	(177)	(11,090)
6/30/2008	8	4	(1)	(285)	(246)	(44)	(2,724)
6/30/2007	8	3	0	223	174	33	2,058
9/30/2006	2, 8**	0, 2**	0	98	71	14	892
9/30/2005	8	1	0	54	36	8	482
Total Deferral			\$2	(\$381)	(\$255)	(\$55)	(\$3,304)
c.	Market Value less Deferral (a-b)	\$141	\$5,565	\$6,621	\$949	\$60,654	
d.	70% of Market Value of Assets	\$100	\$3,629	\$4,456	\$626	\$40,145	
e.	130% of Market Value of Assets	\$186	\$6,740	\$8,275	\$1,163	\$74,555	
f.	<b>Actuarial Value of Assets***</b>	<b>\$141</b>	<b>\$5,565</b>	<b>\$6,621</b>	<b>\$949</b>	<b>\$60,654</b>	

Note: Totals may not agree due to rounding.

\*PSERS Plan 2 = 3 years deferred, 1 year remaining; LEOFF Plan 2 = 5 years deferred, 3 years remaining; all other plans = 6 years deferred, 4 years remaining.

\*\*PSERS Plan 2 = 2 years deferred, 0 years remaining; all other plans = 8 years deferred, 2 years remaining.

\*\*\*Actuarial Value of Assets can never be less than 70% or greater than 130% of the market value of assets.

<b>Investment Gains and (Losses) for Prior Year</b>					
<i>(Dollars in Millions)</i>	<b>PERS 1</b>	<b>PERS 2/3*</b>	<b>TRS 1</b>	<b>TRS 2/3*</b>	<b>SERS 2/3*</b>
a. 2010 Market Value (at WSIB)	\$7,624	\$16,334	\$6,403	\$5,527	\$2,229
b. Total Cash Flow	(970)	255	(778)	111	33
c. 2011 Market Value (at WSIB)	8,180	20,061	6,905	6,817	2,737
d. Actual Return (c - b - a)	\$1,525	\$3,472	\$1,281	\$1,178	\$474
e. Weighted Asset Amount	\$7,127	\$16,415	\$5,991	\$5,567	\$2,239
f. Expected Return (8% x e)	570	1,313	479	445	179
g. Investment Gain/(Loss) for Prior Year (d - f)	955	2,159	801	733	295
h. Dollar-Weighted Rate of Return	21.37%	21.16%	21.35%	21.17%	21.19%

Note: Totals may not agree due to rounding.

\*Defined Benefit portion only.

<b>Investment Gains and (Losses) for Prior Year</b>					
<i>(Continued)</i>					
<i>(Dollars in Millions)</i>	<b>PSERS 2</b>	<b>LEOFF 1</b>	<b>LEOFF 2</b>	<b>WSPRS</b>	<b>Total</b>
a. 2010 Market Value (at WSIB)	\$91	\$4,585	\$5,066	\$763	\$48,623
b. Total Cash Flow	29	(339)	198	(28)	(1,488)
c. 2011 Market Value (at WSIB)	141	5,185	6,349	894	57,268
d. Actual Return (c - b - a)	\$21	\$938	\$1,085	\$159	\$10,134
e. Weighted Asset Amount	\$105	\$4,405	\$5,150	\$748	\$47,747
f. Expected Return (8% x e)*	8	352	386	60	3,794
g. Investment Gain/(Loss) for Prior Year (d - f)	13	586	699	99	6,340
h. Dollar-Weighted Rate of Return	20.35%	21.29%	21.08%	21.23%	21.22%

Note: Totals may not agree due to rounding.

\* The expected return for LEOFF 2 is (7.5% x e).

## Funded Status

We report a plan's funded status by comparing the plan's current assets to the present value of earned pensions of its members. A plan's funded status can vary significantly, depending on the assumptions and methods used to determine the plan's assets and liabilities. For this valuation report, we present two funded status measures.

The first funded status measure compares the Actuarial Value of Assets (AVA) to the Projected Unit Credit (PUC) liabilities calculated using a long-term interest assumption. The second measure compares the Market Value of Assets (MVA) to the PUC liabilities calculated using a short-term interest assumption. The next sections describe these measures in more detail and display the resulting funded statuses by plan. Please see the **Glossary** for an explanation of the PUC actuarial cost method.

### Funded Status on an Actuarial Value Basis

We report the funded status on an actuarial value basis as the ratio of the AVA to the PUC liability calculated using the 7.9 percent valuation interest rate assumption (7.5 percent for the Law Enforcement Officers' and Fire Fighters' [LEOFF] Retirement Plan 2). We assume the plan is ongoing and, therefore, we use the same long-term assumptions to develop the liabilities as we used for determining the contribution requirements of the plan. We don't expect the assumptions to match actual experience over short-term periods. However, we do expect these assumptions to reasonably approximate average annual experience over long-term periods. This measure of funded status is consistent with the state's current funding policy and financing plan for future retirement benefits.

We use an asset valuation method to determine the AVA. This asset valuation method smooths the inherent volatility in the MVA by deferring a portion of annual investment gains or losses for a certain number of years. Investment gains and losses occur when the annual return on investments varies from the long-term assumed rate. To determine the 2011 investment gains or losses, we used an investment return assumption of 7.5 percent for LEOFF 2. For all plans except LEOFF 2, we used an investment return assumption of 8 percent because it was the assumption in place for the measurement period (investment returns from July 1, 2010, through June 30, 2011). We will use an investment return assumption of 7.9 percent for next year's measurement period (7.5 percent for LEOFF 2). The AVA provides a more stable measure of the plan's assets on an on-going basis.

We used the PUC actuarial cost method to determine the present value of earned pensions. The PUC liabilities are actuarial liabilities based on members' earned service credit as of the valuation date. They include future assumed salary increases and reflect future service credits for determining benefit eligibility. The PUC liabilities are discounted to the valuation date using the valuation interest rate to determine the present value (today's value). The valuation interest rate is consistent with the long-term expected return on invested contributions.

Comparing the PUC liabilities to the AVA provides an appropriate measure of a plan's funded status. Under current Governmental Accounting Standards Board (GASB) rules, the PUC method is one of several acceptable measures of a plan's funded status. Use of another cost method could also be considered appropriate and could produce materially different results. A plan more/less than 100 percent funded is not automatically considered over-funded/at-risk.

The following table displays the funded status on an actuarial value basis for each plan.

Funded Status on an Actuarial Value Basis*										
(Dollars in Millions)	PERS		TRS		SERS	PSERS	LEOFF		WSPRS	Total
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 2	Plan 1	Plan 2		
PUC Liability	\$12,567	\$18,815	\$9,258	\$6,299	\$2,607	\$107	\$4,135	\$5,576	\$829	\$60,193
Valuation Assets	\$8,883	\$20,997	\$7,485	\$7,141	\$2,872	\$141	\$5,565	\$6,621	\$949	\$60,654
Unfunded Liability	\$3,684	(\$2,182)	\$1,773	(\$842)	(\$265)	(\$34)	(\$1,430)	(\$1,044)	(\$120)	(\$461)
<b>Funded Ratio</b>										
<b>2011 **</b>	<b>71%</b>	<b>112%</b>	<b>81%</b>	<b>113%</b>	<b>110%</b>	<b>132%</b>	<b>135%</b>	<b>119%</b>	<b>115%</b>	<b>101%</b>
2010 ***	74%	113%	84%	116%	113%	129%	127%	119%	118%	102%
2009 **	70%	116%	75%	118%	116%	128%	125%	128%	119%	99%
2008 **	71%	119%	77%	125%	121%	127%	128%	133%	121%	100%
2007 **	71%	120%	76%	130%	126%	120%	123%	129%	118%	99%
2006 **	74%	121%	80%	133%	125%	99%	117%	116%	114%	100%
2005 **	74%	127%	80%	134%	122%	N/A	114%	114%	113%	99%
2004	81%	134%	88%	153%	137%	N/A	109%	117%	118%	105%
2003	82%	142%	89%	155%	138%	N/A	112%	125%	123%	107%
2002	92%	158%	98%	182%	169%	N/A	119%	137%	135%	118%
2001 **	97%	179%	100%	197%	197%	N/A	129%	154%	147%	126%
2000 **	98%	190%	100%	196%	170%	N/A	136%	161%	152%	131%
1999	93%	189%	93%	188%	N/A	N/A	125%	154%	159%	124%
1998	86%	191%	86%	185%	N/A	N/A	117%	160%	147%	116%
1997 **	83%	187%	82%	181%	N/A	N/A	108%	155%	140%	109%
1996	73%	157%	70%	144%	N/A	N/A	89%	130%	128%	92%
1995	68%	150%	65%	136%	N/A	N/A	80%	126%	119%	85%
1994 **	67%	142%	65%	130%	N/A	N/A	68%	124%	110%	80%
1993	70%	142%	62%	126%	N/A	N/A	68%	127%	110%	79%
1992	67%	139%	59%	127%	N/A	N/A	65%	128%	108%	75%
1991	67%	149%	59%	131%	N/A	N/A	66%	154%	106%	75%
1990	66%	154%	60%	140%	N/A	N/A	65%	153%	105%	74%
1989 **	65%	162%	58%	144%	N/A	N/A	65%	158%	103%	73%
1988	66%	165%	59%	143%	N/A	N/A	66%	153%	102%	72%
1987	71%	175%	58%	135%	N/A	N/A	69%	157%	95%	74%
1986	63%	162%	50%	125%	N/A	N/A	57%	142%	87%	63%

Note: Totals may not agree due to rounding.

\*Liabilities valued using the PUC cost method at an interest rate of 7.9% (7.5% for LEOFF 2). All assets have been valued under the actuarial asset method.

\*\*Assumptions changed.

\*\*\*LEOFF 2 values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

The present value of actuarial liabilities is sensitive to the interest rate assumption. The following tables show how the funded status changes when we use different interest rate assumptions. We calculated liabilities using varying interest rates to show this sensitivity.

<b>Funded Status at a 1% Lower Interest Rate Assumption*</b>										
<i>(Dollars in Millions)</i>	<b>PERS</b>		<b>TRS</b>		<b>SERS</b>	<b>PSERS</b>	<b>LEOFF</b>		<b>WSPRS</b>	<b>Total</b>
	<b>Plan 1</b>	<b>Plan 2/3</b>	<b>Plan 1</b>	<b>Plan 2/3</b>	<b>Plan 2/3</b>	<b>Plan 2</b>	<b>Plan 1</b>	<b>Plan 2</b>		
PUC Liability	\$13,616	\$21,934	\$10,029	\$7,467	\$3,030	\$133	\$4,523	\$6,645	\$950	\$68,327
Valuation Assets	\$8,883	\$20,997	\$7,485	\$7,141	\$2,872	\$141	\$5,565	\$6,621	\$949	\$60,654
Unfunded Liability	\$4,732	\$937	\$2,544	\$326	\$158	(\$8)	(\$1,043)	\$24	\$1	\$7,673
<b>Funded Ratio</b>										
<b>2011</b>	<b>65%</b>	<b>96%</b>	<b>75%</b>	<b>96%</b>	<b>95%</b>	<b>106%</b>	<b>123%</b>	<b>100%</b>	<b>100%</b>	<b>89%</b>
2010**	68%	96%	78%	97%	96%	103%	116%	99%	102%	90%
2009	64%	99%	69%	99%	99%	102%	114%	107%	103%	87%
2008	65%	100%	70%	104%	103%	101%	117%	111%	105%	88%
2007	65%	101%	70%	108%	107%	95%	111%	107%	102%	87%

Note: Totals may not agree due to rounding.

\*Liabilities valued using the PUC cost method at an interest rate of 6.9% (6.5% for LEOFF 2). All assets have been valued under the actuarial asset method.

\*\*LEOFF 2 values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

<b>Funded Status at a 1% Higher Interest Rate Assumption*</b>										
<i>(Dollars in Millions)</i>	<b>PERS</b>		<b>TRS</b>		<b>SERS</b>	<b>PSERS</b>	<b>LEOFF</b>		<b>WSPRS</b>	<b>Total</b>
	<b>Plan 1</b>	<b>Plan 2/3</b>	<b>Plan 1</b>	<b>Plan 2/3</b>	<b>Plan 2/3</b>	<b>Plan 2</b>	<b>Plan 1</b>	<b>Plan 2</b>		
PUC Liability	\$11,657	\$16,314	\$8,589	\$5,378	\$2,266	\$87	\$3,802	\$4,737	\$731	\$53,561
Valuation Assets	\$8,883	\$20,997	\$7,485	\$7,141	\$2,872	\$141	\$5,565	\$6,621	\$949	\$60,654
Unfunded Liability	\$2,774	(\$4,683)	\$1,104	(\$1,763)	(\$607)	(\$53)	(\$1,763)	(\$1,884)	(\$218)	(\$7,093)
<b>Funded Ratio</b>										
<b>2011</b>	<b>76%</b>	<b>129%</b>	<b>87%</b>	<b>133%</b>	<b>127%</b>	<b>161%</b>	<b>146%</b>	<b>140%</b>	<b>130%</b>	<b>113%</b>
2010**	80%	130%	91%	136%	130%	157%	139%	141%	133%	115%
2009	76%	135%	82%	140%	134%	158%	137%	152%	135%	112%
2008	77%	139%	84%	149%	141%	157%	141%	159%	137%	113%
2007	77%	141%	84%	155%	148%	149%	135%	154%	134%	112%

Note: Totals may not agree due to rounding.

\*Liabilities valued using the PUC cost method at an interest rate of 8.9% (8.5% for LEOFF 2). All assets have been valued under the actuarial asset method.

\*\*LEOFF 2 values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

## Funded Status on a Market Value Basis

We report funded status on a market value basis as the ratio of the MVA to the PUC liability calculated using a 5 percent interest rate assumption. The funded status on a market value basis provides a measure of the plan's health if the plan is "settled" or "immunized" on the valuation date. Immunizing a pension plan means attaching assets to liabilities so the assets maturing each year match the expected pension payments due from the pension plan each year. A plan can be settled by purchasing annuities on the open market for each member, or immunized by investing the assets in bonds with payment streams that match the expected benefit payments. Expected benefit payments would include growth for future salary inflation, which is why we have used the PUC liability measure instead of a purely accrued liability measure.

Because most of the Washington State plans covered in this valuation report are open and ongoing, we only present the market value funded status for the closed Plans 1. Although the Plans 1 are closed to new members, they are not settled and have not been immunized. However, there is an opportunity to immunize these plans in the future. They are considered ongoing plans because current annuitants continue to receive their benefits from the retirement trust fund, and current active members continue to accrue benefits under the plan. However, because the plans are closed to new members, the future benefit payments are more predictable, have a shorter duration, and would be easier to immunize. The decision to settle or immunize the Plans 1 is complex and would require additional actuarial analysis and information that is outside the scope of this report.

The table on the right displays the market value funded status for each plan as described above.

Both funded status measures vary based on the measurement (valuation) date and the market conditions on that date. The market value measure, however, is more volatile because the asset value has no smoothing and the ability to immunize the plan depends on current bond and annuity purchase rates.

Funded Status on a Market Value Basis*				
(Dollars in Millions)	PERS	TRS	LEOFF	
	Plan 1	Plan 1	Plan 1	
Projected Unit Credit Liability	\$16,106	\$11,860	\$5,458	
Market Value of Assets	8,178	6,902	5,185	
Unfunded Liability	\$7,929	\$4,958	\$273	
<b>Funded Ratio</b>				
	<b>2011</b>	<b>51%</b>	<b>58%</b>	<b>95%</b>
	2010	49%	56%	82%
	2009	43%	46%	76%
	2008	60%	65%	107%
	2007	66%	70%	114%
	2006	64%	67%	102%
	2005	61%	63%	94%
	2004	59%	60%	82%

Note: Totals may not agree due to rounding.

\* Liabilities have been valued using an interest rate of 5% while assets are their market value. The 5% interest rate approximates the "risk-free" rate of return on assets while maintaining consistency with the 3% inflation assumption used to project future benefit payments. This method was not used to determine contribution requirements. Prior to 2011, liabilities were valued at 5.5%.

## Actuarial Gains/Losses

The next three tables display actuarial gains and losses, expressed as contribution rate changes. Actuaries use gain/loss analysis to compare actual changes to assumed changes in assets, liabilities, and salaries from various sources. We also use this analysis to determine:

- ❖ The accuracy of our valuation model and annual processing.
- ❖ Why contribution rates changed.
- ❖ To determine the reasonableness of the actuarial assumptions.

Actuarial gains will reduce contribution rates; actuarial losses will increase contribution rates. Under a reasonable set of actuarial assumptions, actuarial gains and losses will offset over long-term experience periods.

Change in Employer and State Contribution Rate by Source						
Change in Employer Rate	PERS	TRS	SERS*	PSERS*	LEOFF**	WSPRS
<b>2010 Contribution Rate Before Laws of 2011</b>	<b>8.23%</b>	<b>9.04%</b>	<b>8.62%</b>	<b>9.58%</b>	<b>(5.02%)</b>	<b>7.71%</b>
Remove Rate Floor / Ceiling	0.00%	0.00%	0.00%	0.00%	(0.77%)	(4.93%)
Remove Plan 1 Benefit Improvements After 2009	0.00%	0.00%	0.00%	0.00%	N/A	N/A
Prior Employer Liability	(0.11%)	(0.77%)	(1.00%)	0.00%	0.00%	(1.32%)
2010 Update Adjustment***	N/A	N/A	N/A	N/A	0.18%	N/A
<b>2010 Adjusted Contribution Rate</b>	<b>8.12%</b>	<b>8.27%</b>	<b>7.62%</b>	<b>9.58%</b>	<b>(5.61%)</b>	<b>1.46%</b>
Liability Gains/Losses	(0.11%)	0.34%	0.02%	0.07%	(0.67%)	(0.02%)
Asset Gains/Losses	0.76%	1.06%	0.52%	(0.01%)	0.56%	0.54%
Present Value of Future Salaries Gains/Losses	(0.15%)	(0.54%)	(0.26%)	(0.13%)	(0.23%)	0.00%
Incremental Changes	0.19%	0.22%	0.10%	(0.02%)	(1.11%)	0.26%
Other Gains/Losses	(0.03%)	(0.06%)	0.50%	0.59%	0.05%	(0.05%)
<b>Total Change</b>	<b>0.66%</b>	<b>1.02%</b>	<b>0.88%</b>	<b>0.50%</b>	<b>(1.40%)</b>	<b>0.73%</b>
<b>2011 Preliminary Contribution Rate</b>	<b>8.78%</b>	<b>9.29%</b>	<b>8.50%</b>	<b>10.08%</b>	<b>(7.01%)</b>	<b>2.19%</b>
Increase from Applied Rate Floor	0.00%	0.00%	0.00%	0.00%	0.55%	4.12%
Decrease from Applied Rate Ceiling	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
Increase from Plan 1 Benefit Improvements After 2009	0.14%	0.15%	0.14%	0.14%	N/A	N/A
Rate to Amortize Prior Liability	0.11%	0.77%	1.00%	0.00%	0.00%	1.32%
Excess Member Rate	N/A	0.00%	N/A	N/A	N/A	0.00%
Laws of 2012	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>2011 Adjusted Contribution Rate</b>	<b>9.03%</b>	<b>10.21%</b>	<b>9.64%</b>	<b>10.22%</b>	<b>(6.46%)</b>	<b>7.63%</b>

\*The SERS and PSERS rates include the UAAL rate for PERS Plan 1. The "Other Gains/Losses" category includes the "Total Change" for the PERS 1 UAAL rate in those systems.

\*\*The LEOFF contribution rate is the state's portion for Plan 2 (20% of the Normal Cost) plus the UAAL rate for Plan 1.

\*\*\*LEOFF values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

## Change in Employer and State Plan 2/3 Normal Cost Rate by Source

Change in Normal Costs	PERS	TRS	SERS	PSERS	LEOFF*	WSPRS**
<b>2010 Normal Cost Before Laws of 2011</b>	<b>4.97%</b>	<b>5.56%</b>	<b>5.36%</b>	<b>6.32%</b>	<b>2.94%</b>	<b>7.71%</b>
Remove Rate Floor / Ceiling	0.00%	0.00%	0.00%	0.00%	(0.77%)	(4.93%)
Remove Prior Employer Liability	(0.11%)	(0.77%)	(1.00%)	0.00%	0.00%	(1.32%)
2010 Update Adjustment***	N/A	N/A	N/A	N/A	0.38%	N/A
<b>2010 Adjusted Normal Cost Rate</b>	<b>4.86%</b>	<b>4.79%</b>	<b>4.36%</b>	<b>6.32%</b>	<b>2.55%</b>	<b>1.46%</b>
Liabilities						
Salaries	(0.57%)	(0.55%)	(0.49%)	(0.30%)	(0.20%)	(1.20%)
Termination	(0.09%)	(0.18%)	(0.05%)	(0.08%)	0.00%	0.00%
Retirement	0.02%	0.05%	0.03%	0.00%	(0.01%)	(0.20%)
Growth / Return to Work	0.33%	0.71%	0.47%	0.47%	0.14%	0.41%
Other Liabilities	0.09%	0.06%	0.06%	(0.02%)	0.03%	0.97%
<b>Total Liability Gains/Losses</b>	<b>(0.22%)</b>	<b>0.09%</b>	<b>0.02%</b>	<b>0.07%</b>	<b>(0.04%)</b>	<b>(0.02%)</b>
<b>Asset Gains/Losses</b>	<b>0.32%</b>	<b>0.39%</b>	<b>0.52%</b>	<b>(0.01%)</b>	<b>0.00%</b>	<b>0.54%</b>
<b>Present Value of Future Salaries Gains/Losses</b>	<b>(0.04%)</b>	<b>(0.28%)</b>	<b>(0.26%)</b>	<b>(0.13%)</b>	<b>(0.04%)</b>	<b>0.00%</b>
Incremental Changes						
Plan Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Method Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Assumption Change	0.04%	0.03%	0.09%	(0.02%)	0.00%	0.25%
Correction Change	0.00%	0.00%	0.01%	0.00%	0.00%	0.01%
<b>Total Incremental Changes Gains/Losses</b>	<b>0.04%</b>	<b>0.03%</b>	<b>0.10%</b>	<b>(0.02%)</b>	<b>0.00%</b>	<b>0.26%</b>
<b>Other Gains/Losses</b>	<b>(0.04%)</b>	<b>(0.06%)</b>	<b>(0.10%)</b>	<b>(0.01%)</b>	<b>0.01%</b>	<b>(0.05%)</b>
<b>Total Change</b>	<b>0.06%</b>	<b>0.17%</b>	<b>0.28%</b>	<b>(0.10%)</b>	<b>(0.07%)</b>	<b>0.73%</b>
<b>2011 Preliminary Normal Cost</b>	<b>4.92%</b>	<b>4.96%</b>	<b>4.64%</b>	<b>6.22%</b>	<b>2.48%</b>	<b>2.19%</b>
Increase from Applied Rate Floor	0.00%	0.00%	0.00%	0.00%	0.55%	4.12%
Rate to Amortize Prior Employer Liability	0.11%	0.77%	1.00%	0.00%	0.00%	1.32%
Excess Member Rate	N/A	0.00%	N/A	N/A	N/A	0.00%
Laws of 2012	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
<b>2011 Adjusted Normal Cost</b>	<b>5.03%</b>	<b>5.73%</b>	<b>5.64%</b>	<b>6.22%</b>	<b>3.03%</b>	<b>7.63%</b>

\*The LEOFF contribution rate is the state's portion only (20% of the Plan 2 Normal Cost).

\*\*The WSPRS normal cost contribution rate applies to Plans 1 and 2.

\*\*\*LEOFF values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

Change in Employer and State Plan 1 UAAL Rate by Source						
Change in UAAL Rate	PERS	TRS	SERS*	PSERS*	LEOFF**	WSPRS
<b>2010 UAAL Rate Before Laws of 2011</b>	<b>3.26%</b>	<b>3.48%</b>	<b>3.26%</b>	<b>3.26%</b>	<b>(7.96%)</b>	<b>N/A</b>
Remove Rate Floor / Ceiling	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
Remove Plan 1 Benefit Improvements After 2009	0.00%	0.00%	0.00%	0.00%	N/A	N/A
2010 Update Adjustment***	N/A	N/A	N/A	N/A	(0.20%)	N/A
<b>2010 Adjusted UAAL Rate</b>	<b>3.26%</b>	<b>3.48%</b>	<b>3.26%</b>	<b>3.26%</b>	<b>(8.16%)</b>	<b>N/A</b>
Liabilities						
Salaries	(0.07%)	(0.10%)	N/A	N/A	(0.04%)	N/A
Termination	0.00%	0.00%	N/A	N/A	0.00%	N/A
Retirement	(0.02%)	(0.04%)	N/A	N/A	(0.03%)	N/A
Return to Work	0.01%	0.01%	N/A	N/A	0.00%	N/A
Inflation (CPI)	0.00%	0.00%	N/A	N/A	(0.74%)	N/A
Other Liabilities	0.19%	0.38%	N/A	N/A	0.18%	N/A
<b>Total Liability Gains/Losses</b>	<b>0.11%</b>	<b>0.25%</b>	<b>N/A</b>	<b>N/A</b>	<b>(0.63%)</b>	<b>N/A</b>
<b>Asset Gains/Losses</b>	<b>0.44%</b>	<b>0.67%</b>	<b>N/A</b>	<b>N/A</b>	<b>0.56%</b>	<b>N/A</b>
<b>Present Value of Future Salaries Gains/Losses</b>	<b>(0.11%)</b>	<b>(0.26%)</b>	<b>N/A</b>	<b>N/A</b>	<b>(0.19%)</b>	<b>N/A</b>
Incremental Changes						
Plan Change	(0.01%)	(0.02%)	N/A	N/A	0.00%	N/A
Method Change	0.00%	0.00%	N/A	N/A	0.00%	N/A
Assumption Change	0.16%	0.21%	N/A	N/A	(1.11%)	N/A
Correction Change	0.00%	0.00%	N/A	N/A	0.00%	N/A
<b>Total Incremental Changes Gains/Losses</b>	<b>0.15%</b>	<b>0.19%</b>	<b>N/A</b>	<b>N/A</b>	<b>(1.11%)</b>	<b>N/A</b>
<b>Other Gains/Losses</b>	<b>0.01%</b>	<b>0.00%</b>	<b>N/A</b>	<b>N/A</b>	<b>0.04%</b>	<b>N/A</b>
<b>Total Change</b>	<b>0.60%</b>	<b>0.85%</b>	<b>0.60%</b>	<b>0.60%</b>	<b>(1.33%)</b>	<b>N/A</b>
<b>2011 Preliminary UAAL Rate</b>	<b>3.86%</b>	<b>4.33%</b>	<b>3.86%</b>	<b>3.86%</b>	<b>(9.49%)</b>	<b>N/A</b>
Increase from Applied Rate Floor	0.00%	0.00%	0.00%	0.00%	N/A	N/A
Decrease from Applied Rate Ceiling	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
Increase from Plan 1 Benefit Improvements After 2009	0.14%	0.15%	0.14%	0.14%	N/A	N/A
Laws of 2012	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
<b>2011 Adjusted UAAL Rate</b>	<b>4.00%</b>	<b>4.48%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>(9.49%)</b>	<b>N/A</b>

\*The SERS and PSERS rates are to fund the PERS Plan 1 UAAL.

\*\*The LEOFF contribution rate is the UAAL rate for plan 1. The plan has a surplus of assets over liabilities, so no rate is currently payable.

\*\*\*LEOFF values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

## Effect of Plan, Assumption, and Method Changes

In addition to experience gains or losses, changes in plan provisions or actuarial assumptions or methods can also impact contribution rates.

### Plan Changes

- ❖ None.

### Assumption Changes

- ❖ We changed economic assumptions as adopted by the Pension Funding Council and in accordance with Chapter 7, Laws of 2012, First Special Session.

### Method Changes

- ❖ None.

## Effect of Changes on the Current Valuation

The following table shows the effect of the above changes on the current actuarial valuation results.

Effect of Plan, Assumption, and Method Changes									
	PERS 1	PERS 2/3	TRS 1	TRS 2/3	SERS 2/3	PSERS 2	LEOFF 1	LEOFF 2*	WSPRS
<b>Before Changes</b>									
PVFB	\$12,640	\$27,390	\$9,249	\$9,780	\$3,688	\$459	\$4,302	\$8,706	\$989
PUC Liability	12,486	18,773	9,193	6,275	2,592	106	4,286	5,565	823
Actuarial Value of Assets	8,883	20,997	7,485	7,141	2,872	141	5,565	6,621	949
Unfunded Liability	3,603	(2,223)	1,708	(866)	(281)	(35)	(1,279)	(1,056)	(126)
<b>Employer Contribution Rate</b>	<b>8.84%</b>	<b>8.84%</b>	<b>9.93%</b>	<b>9.93%</b>	<b>8.88%</b>	<b>9.60%</b>	<b>0.00%</b>	<b>4.54%</b>	<b>7.67%</b>
<b>After Changes</b>									
PVFB	\$12,722	\$27,336	\$9,313	\$9,762	\$3,696	\$455	\$4,150	\$8,720	\$994
PUC Liability	12,567	18,815	9,258	6,299	2,607	\$107	4,135	5,576	829
Actuarial Value of Assets	8,883	20,997	7,485	7,141	2,872	\$141	5,565	6,621	949
Unfunded Liability	3,684	(2,182)	1,773	(842)	(265)	(\$34)	(1,430)	(1,044)	(120)
<b>Employer Contribution Rate</b>	<b>9.03%</b>	<b>9.03%</b>	<b>10.21%</b>	<b>10.21%</b>	<b>9.64%</b>	<b>10.22%</b>	<b>0.00%</b>	<b>4.54%</b>	<b>7.63%</b>
<b>Increase / (Decrease) in Rate</b>	<b>0.19%</b>	<b>0.19%</b>	<b>0.28%</b>	<b>0.28%</b>	<b>0.76%</b>	<b>0.62%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>(0.04%)</b>

Before and after changes include actuarial gains and losses for the year ending 6/30/2011.

Both before and after contribution rates include rate minimums and maximums.

\*The LEOFF Plan 2 contribution rate is the employers' portion only (30% of the Plan 2 Normal Cost). The LEOFF Plan 2 Retirement Board adopted new economic assumptions to be included in the 2010 LEOFF 2 valuation, which was updated after the 2010 AVR was published.