



Summary of Key Results

Section One

Intended Use

The purpose of this report is to develop contribution rates required to fund the Washington State retirement systems based on the funding policy described in this section. This report provides information on the contribution rates, funding progress, and developments in the plans over the past year. This report also discloses the data, assumptions, and methods we used to develop the contribution rates. This report is not intended to satisfy the accounting requirements under the Governmental Accounting Standards Board rules (GASB).

Contribution Rates

The Office of the State Actuary (OSA) determined the member and employer contribution rates as a percentage of salary. The summary table on the right shows contribution rates based on the 2011 valuation along with rates from the previous valuation. The **Actuarial Exhibits** section of this report shows how we developed these rates.

No member or employer/state contributions are required for the Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) Plan 1 when the plan remains fully funded. See RCW 41.26.080(2).

Minimum employer contribution rates adopted by the Legislature for the Public Employees' Retirement System (PERS) Plan 1 and the Teachers' Retirement System (TRS) Plan 1 become effective at the beginning of the 2015-17 Biennium.

During the 2012 Interim, the LEOFF Plan 2 Retirement Board adopted different rates than those calculated in this valuation. The Pension Funding Council (PFC) also adopted alternate contribution rates for the Public Safety Employees' Retirement System (PSERS) and the Washington State Patrol Retirement System (WSPRS). The adopted rates are shown in the **Actuarial Exhibits** section of this report and further information is available in the **Actuarial Certification Letter**.

Contribution Rate-Setting Cycle

Under current Washington State law, in July of even-numbered years, the PFC reviews the basic contribution rates calculated by OSA based on an actuarial valuation performed on asset, participant, and plan information compiled in odd-numbered years. In calculating basic contribution rates, OSA applies the statutory funding policies described in this section.

The PFC may adopt changes to contribution rates by an affirmative vote of at least four members. The basic rates adopted by the PFC will remain in place for the ensuing biennium, subject to revision by the Legislature. The LEOFF 2 Board performs these duties for LEOFF 2 under the same cycle.

Contribution Rates				
	Plan 1		Plan 2/3	
	2011	2010	2011	2010
PERS				
Member*	6.00%	6.00%	4.92%	4.91%
Total Employer	9.03%	8.41%	9.03%	8.41%
TRS				
Member*	6.00%	6.00%	4.96%	4.80%
Total Employer	10.21%	9.18%	10.21%	9.18%
SERS				
Member*	N/A	N/A	4.64%	4.37%
Total Employer	N/A	N/A	9.64%	8.76%
PSERS				
Member	N/A	N/A	6.22%	6.32%
Total Employer	N/A	N/A	10.22%	9.71%
LEOFF				
Member	0.00%	0.00%	7.57%	7.57%
Employer	0.00%	0.00%	4.54%	4.54%
State	0.00%	0.00%	3.03%	3.03%
WSPRS				
Member	6.31%	6.39%	6.31%	6.39%
Employer (State)	7.63%	7.71%	7.63%	7.71%

Employer rates exclude administrative expense rate.

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

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

RCW 41.45.070 requires that a temporary and supplemental contribution rate increase be charged to fund the cost of benefit enhancements enacted following the adoption of the basic rates. Supplemental contribution rates are included in the basic rates at the beginning of the next contribution rate-setting cycle.

Funding Policy

Washington State relies on systematic actuarial funding to finance the on-going cost of the state retirement systems. Under this financing approach, we reduce the cost of future pension payments by the expected long-term return on invested contributions.

The state's funding policy is found in Chapter 41.45 RCW – Actuarial Funding of State Retirement Systems. It includes the following goals – to:

- ❖ Provide a dependable and systematic process for funding the benefits to members and retirees of the Washington State Retirement Systems.
- ❖ Fully fund the retirement system Plans 2 and 3, and WSPRS, as provided by law.
- ❖ Fully amortize the total cost of LEOFF Plan 1 not later than June 30, 2024.
- ❖ Fully amortize the Unfunded Actuarial Accrued Liability (UAAL) in PERS Plan 1 and TRS Plan 1 within a rolling ten-year period using methods and assumptions that balance needs for increased benefit security, decreased contribution rate volatility, and affordability of pension contribution rates.
- ❖ Establish long-term employer contribution rates that will remain a relatively predictable proportion of future state budgets.
- ❖ Fund, to the extent feasible, all benefits for Plan 2 and 3 members over the working lives of those members so that the taxpayers who receive the benefit of those members' service pay the cost of those benefits.

Based on the funding policy, the same contribution rate is charged to employers within each system regardless of the plan in which employees hold membership (except for LEOFF). In addition, all benefit increases that become effective after June 30, 2009, for PERS Plan 1 and TRS Plan 1 members, are funded over a fixed ten-year period.

The Washington State Investment Board (WSIB) directs the investment of retirement system contributions. RCW 43.33A.110 requires WSIB to maximize investment returns at a prudent level of risk.

Comments on 2011 Results

The following comments summarize the key changes from the last valuation. Please see the **Actuarial Certification Letter** for additional comments on the 2011 valuation results.

The actual rate of investment return for the plan year was above the assumed rate of 8 percent (7.5 percent assumed for LEOFF 2). The actual, annualized investment return on the market value of assets was 21.14 percent. The rate of investment return on the actuarial value of assets for the plan year was lower than the assumed rate of 8 percent (7.5 percent for LEOFF 2).

Gains or losses to liabilities and salaries also impact contribution rates. These occur when annual economic and demographic experience differs from our long-term assumptions or when there are

changes in plan provisions or actuarial assumptions or methods. We summarize gains/losses for the total employer contribution rate below.

Overall, the liability changes were mixed, resulting in actuarial gains or losses, depending on the system. PERS, LEOFF, and WSPRS saw liabilities increase less than expected, resulting in actuarial gains. The remaining systems experienced actuarial losses due to liability changes. The key reasons for the liability gains include: salaries increased less than expected; more terminations in the Plans 2/3 than expected; and later retirements in the Plans 1 than expected. The key reason for liability losses comes from the increase in liabilities due to new entrants.

The present value of future salaries generally increased more than expected so the salary base for collecting contributions is larger and this results in an actuarial gain to the system. The present value of future salaries in WSPRS changed as expected, resulting in neither a gain nor a loss.

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

Detailed gain and loss information by system can be found in the **Actuarial Exhibits** section of this report.

Actuarial Liabilities

The table below summarizes key measures of actuarial liability along with the liabilities from last year's valuation. The Future Value of Fully Projected Benefits represents the total expected value of all future benefit payments for all members of all systems as of the valuation date. The Present Value of Fully Projected Benefits represents today's value of the Future Value of Fully Projected Benefits when we discount future benefit payments with the valuation interest rate. In other words, if we invest the Present Value of Fully Projected Benefits as a lump sum amount at the valuation date and earn the valuation interest rate each year, there would be enough money to pay all expected future benefit payments for current members.

Actuarial Liabilities		
(Dollars in Millions)	2011	2010
All Systems		
Future Value of Fully Projected Benefits*	\$436,095	\$445,589
Present Value of Fully Projected Benefits*	77,147	74,621
Present Value of Accrued (Earned) Benefits*	60,193	57,430
Unfunded Actuarial Accrued Liability**	\$3,797	\$3,278
Valuation Interest Rate***	7.90%	8.00%

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

**For PERS 1, TRS 1, and LEOFF 1.

***7.50% in LEOFF 2.

The Present Value of Accrued (Earned) Benefits identifies the portion of the present value of future benefits that has been earned as of the valuation date based on the Projected Unit Credit (PUC) actuarial cost method. The Unfunded Actuarial Accrued Liability (UAAL) represents the excess, if any, of the Present Value of Future Benefits earned at the valuation date over the Actuarial Value of Assets. In other words, the UAAL equals the present value of benefits earned at the valuation date not covered by current actuarial assets.

See the **Actuarial Exhibits** section of this report for a summary of actuarial liabilities by system and plan and a disclosure of expected future benefit payments by year for each system and plan. Also, see the **Glossary** for brief explanations of the actuarial terms.

Assets

The next table shows the combined Market Value of Assets and Actuarial (or smoothed) Value of Assets along with approximate rates of investment return. To limit the volatility in contribution rates and funded status due to short-term market volatility, we smooth (or defer) the difference between actual and expected annual investment returns over a period not to exceed eight years. The Actuarial Value of Assets equals the Market Value of Assets less the Total Deferred Investment Gains and (Losses) at the valuation date. The Actuarial Value of Assets can never be less than 70 percent or greater than 130 percent of the Market Value of Assets.

See the **Actuarial Exhibits** section of this report for a summary of assets by system and plan, and for the development of the Actuarial Value of Assets.

Assets		
(Dollars in Millions)	2011	2010
All Systems		
Market Value of Assets	\$57,350	\$48,700
Actuarial Value of Assets	60,654	58,442
Contributions*	1,456	1,477
Disbursements	2,980	2,804
Investment Return	10,121	5,781
Other**	\$53	\$41
Rate of Return on Assets***	21.14%	13.21%

*Employee and Employer.

**Includes transfers, restorations, payables, etc.

***This is the time-weighted rate of return on the Market Value of Assets, net of expenses. The Actuarial Value of Assets is used in determining contribution rates.

Funded Status

The funded status helps readers evaluate the health of a pension plan. A history of funded status measured consistently over a defined period helps readers evaluate a plan's funding progress over time. The funded status represents the portion of the present value of earned benefits covered by today's actuarial assets. A plan with a 100 percent funded status has one dollar in actuarial assets for each dollar of earned (or accrued) liability at the valuation date. A plan more/less than 100 percent funded is not automatically considered over-funded/at-risk.

We use the PUC actuarial cost method to report the funded status of the plans. The PUC method takes into account future salary and service growth for purposes of determining future benefit amounts and eligibility for those benefits, but only reflects service credit earned at the valuation date for determining earned (or accrued) benefits.

Comparing the PUC liabilities to the Actuarial Value of Assets provides an appropriate measure of a plan's funded status. Under current 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.

We did not use the PUC cost method to determine contribution requirements in this valuation. Please see the **Glossary** for a more detailed explanation of PUC.

The table on the right displays the funded status for all the systems combined. We provide this table for summarization purposes only. Assets from an individual qualified retirement plan may not be used to

Funded Status		
(Dollars in Millions)	2011	2010
All Systems		
a. Projected Unit Credit Liability*	\$60,193	\$57,430
b. Market Value of Assets	57,350	48,700
c. Deferred Gains/(Losses)	(3,304)	(9,742)
d. Actuarial Value of Assets (b-c)	60,654	58,442
e. Unfunded Liability (a-d)*	(\$461)	(\$1,012)
f. Projected Unit Credit Funded Ratio (d/a)*	101%	102%

Note: Totals may not agree due to rounding.

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

fund benefits from another plan. See the **Actuarial Exhibits** section of this report for the funded status by system and plan. We also provide a history of funded status since 1986 and funded status under alternate assumptions and methods in the **Actuarial Exhibits** section.

Participant Data

The table on the right summarizes participant data used in the actuarial valuation for the plan year ending June 30, 2011, along with information from last year's valuation. See the **Participant Data** section of this report for participant data summarized by system and plan.

Participant Data		
All Systems	2011	2010
Active Members		
Number	293,276	297,563
Total Salaries (in millions)	\$16,313	\$16,327
Average Annual Salary	\$55,623	\$54,869
Average Attained Age	47.5	47.2
Average Service	12.1	11.8
Retirees and Beneficiaries		
Number	138,337	133,358
Average Annual Benefit	\$21,023	\$20,444
Terminated Members		
Number Vested	50,120	48,363
Number "Non-Vested"	113,601	110,933

Key Assumptions	
All Systems	
Valuation Interest Rate*	7.90%
Salary Increase	3.75%
Inflation	3.00%
Growth in Membership**	0.95%

*7.50% in LEOFF 2.

**0.80% in TRS; 1.25% in LEOFF.

Used for the amortization of PERS 1, TRS 1, and LEOFF 1 UAAL only.

Key Assumptions

This table displays key economic assumptions used in the actuarial valuation. Many of these assumptions have changed from last year's valuation. See the **Actuarial Methods and Assumptions** in the Appendix for a detailed listing of assumptions used in this valuation.