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Summary of Key Results

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 below shows contribution rates based on the 2013 valuation along with rates from the previous valuation. The **Actuarial Exhibits** section of this report shows how we developed these rates.

Contribution Rates	Plan 1		Plan 2/3	
	2013	2012	2013	2012
PERS				
Member*	6.00%	6.00%	7.00%	4.83%
Total Employer	12.29%	9.15%	12.29%	9.15%
TRS				
Member*	6.00%	6.00%	6.79%	4.95%
Total Employer	14.47%	10.68%	14.47%	10.68%
SERS				
Member*	N/A	N/A	6.70%	4.59%
Total Employer	N/A	N/A	12.88%	9.80%
PSERS				
Member	N/A	N/A	6.89%	6.07%
Total Employer	N/A	N/A	12.07%	10.28%
LEOFF				
Member	0.00%	0.00%	7.97%	7.74%
Employer	0.00%	0.00%	4.78%	4.64%
State	0.00%	0.00%	3.19%	3.10%
WSPRS				
Member	7.19%	6.44%	7.19%	6.44%
Employer (State)	8.79%	7.76%	8.79%	7.76%

Employer rates exclude administrative expense rate.
**Plan 3 members do not contribute to the defined benefit plan.*

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 2014 Interim, the Pension Funding Council (PFC) and LEOFF Plan 2 Retirement Board (LEOFF 2 Board) adopted different rates than those calculated in the 2013 valuation. The PFC adopted contribution rates lower than the rates calculated in this valuation as part of a three-biennium phase-in. The LEOFF 2 Board adopted higher contribution rates that match the contribution rates collected over the 2013-15 Biennium. 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.

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 Washington State Patrol Retirement System (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 Plans 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 2013 Results

Many factors can influence how actuarial valuation results change from one measurement date to the next. Those factors include changes in the covered population, changes in plan provisions, assumptions, and methods, and experience that varies from our expectations.

For this valuation, assumption changes explain most of the changes from last year's report. For all systems, expect LEOFF 2, we lowered the long-term assumed rate of investment return from 7.9 to 7.8 percent consistent with state law. We also changed the projection scale we use to estimate future improvement in rates of mortality from 50 percent of Scale AA to 100 percent of Scale BB. Both of these assumption changes lead to lower funded status and higher contribution rates than calculated last valuation.

We observed no significant changes in the covered population and there were no changes in plan provisions. We also made no significant changes to our actuarial methods.

In terms of annual plan experience, the actual rate of investment return was 12.36 percent and above the assumed rate. However, the rate of investment return on the actuarial (or smoothed) value of assets was lower than expected for the plan year. We also observed lower than expected salary growth for the year when estimating plan liabilities.

Detailed gain and loss information by system can be found in the **Actuarial Exhibits** section of this report. Please see the **Actuarial Certification Letter** for additional comments on the 2013 valuation results.

Actuarial Liabilities

The table to the far right 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.

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 UAAL represents the excess, if any, of the Present Value of Accrued Benefits 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.

Actuarial Liabilities

(Dollars in Millions)	2013	2012
All Systems		
Future Value of Fully Projected Benefits	$559,013	$436,407
Present Value of Fully Projected Benefits	88,888	79,397
Present Value of Accrued (Earned) Benefits	69,828	62,578
Unfunded Actuarial Accrued Liability*	$6,245	$4,132
Valuation Interest Rate**	7.80%	7.90%

**For PERS 1, TRS 1, and LEOFF 1.*
***7.50% in LEOFF 2.*

Assets

The table on the right 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 fluctuations, 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.

Assets

(Dollars in Millions)	2013	2012
All Systems		
Market Value of Assets	$62,213	$56,753
Actuarial Value of Assets	65,458	63,122
Contributions*	1,807	1,754
Disbursements	3,302	3,137
Investment Return	6,907	747
Other**	$48	$39
Rate of Return on Assets***	12.36%	1.40%

**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.*

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.

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 with a funded status of at least 100 percent is generally considered to be on target with its financing plan. However, 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.

GASB Statements 67 and 68 become effective after June 15, 2015, replace the current GASB Statements, and require use of the Entry Age Normal Cost Method (EANC) for accounting purposes. We will begin reporting the EANC funded status with the next actuarial valuation report, as of June 30, 2014, to improve consistency between this funding report and future accounting disclosures.

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 following table 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 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.

Funded Status

(Dollars in Millions)	2013	2012
All Systems		
a. Projected Unit Credit Liability	$69,828	$62,578
b. Market Value of Assets	62,213	56,753
c. Deferred Gains/(Losses)	(3,245)	(6,369)
d. Actuarial Value of Assets (b-c)	65,458	63,122
e. Unfunded Liability (a-d)	$4,370	($544)
f. Projected Unit Credit Funded Ratio (d/a)	94%	101%

Note: Totals may not agree due to rounding.

Participant Data

The next table summarizes participant data used in the actuarial valuation for the plan year ending June 30, 2013, 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	2013	2012
Active Members		
Number	291,345	289,727
Total Salaries (in Millions)	$16,522	$16,245
Average Annual Salary	$56,710	$56,069
Average Attained Age	47.7	47.8
Average Service	12.4	12.4
Retirees and Beneficiaries		
Number	150,145	143,942
Average Annual Benefit	$21,637	$21,321
Terminated Members		
Number Vested	53,356	51,808
Number "Non-Vested"	118,332	116,109

Key Assumptions

This table displays key economic assumptions used in the actuarial valuation.

Key Assumptions	
All Systems	
Valuation Interest Rate*	7.80%
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.*

We also reviewed and updated demographic assumptions during our recent experience study. The Experience Study Report, available on our website, discloses all the assumption changes from the last valuation. See the **Actuarial Methods and Assumptions** in the Appendix for a detailed listing of assumptions used in this valuation.