# Comprehensive Annual Financial Report 

Funds of the State of Washington for the Year Ended June 30, 2016


# Comprehensive Annual Financial Report 

Funds of the State of Washington for the Fiscal Year Ended June 30, 2016

Prepared by:
The Washington State Department of Retirement Systems
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www.drs.wa.gov
$\overparen{\text { DRS }}$

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## Introductory Section

## 2016 Highlights

## DRS is a listening organization

To continuously improve, we know we must always listen to our customers, our partners, our stakeholders and our team members - and act on their feedback.

This emphasis on listening is a fundamental part of how we strengthen DRS services and operations and how we stay focused on the agency's key goals: Elated Customers, Engaged Team Members, Vigilant Resource Steward, Best Practice Leader and Reliable Partner.


WASHINGTON STATE
Department of Retirement Systems

## Introductory Section

## Director's Message

DRS is a listening organization. To continuously improve, we know we must always listen to our customers, our partners, our stakeholders and our team members - and act on their feedback.

This emphasis on listening is a
 fundamental part of how we strengthen DRS services and operations and how we stay focused on the agency's key goals: Elated Customers, Engaged Team Members, Vigilant Resource Steward, Best Practice Leader and Reliable Partner.

In conversations with the many people who are connected to the state's retirement systems, the themes we've heard are consistent and clear. A high demand exists for resources that help our members engage in retirement readiness throughout their careers. The expectation to facilitate online transactions continues to grow. And, as always, customers expect us to live up to the "3 R's" - respectful, responsive and right.

During the past year, these themes have guided DRS in implementing and initiating a variety of improvements:

- Single record keeper for DCP and Plan 3: 2016 marked the culmination of two years of work in successfully transitioning to a single record keeper to serve the state's Plan 3 retirement systems and the Deferred Compensation Program. The transition created immediate benefits for Plan 3 and DCP customers by providing "one-stop" access to their accounts and comprehensive retirement planning information, both online and on the phone. For the long term, the unified approach to recordkeeping services will bring a progression of products and enhancements that will provide personalized retirement readiness tools and services for all DRS customers.
- Automatic enrollment for DCP: Enacted by the Legislature in 2016, this program will
automatically enroll all new, full-time state employees in the Deferred Compensation Program starting in January 2017. (Enrollees will have the ability to opt out if they wish.) Patterned after successful programs in other states, auto-enrollment is expected to significantly boost the number of employees who are increasing their supplemental savings for retirement.
- Online transactions: During the past year, DRS established new ways for customers to process transactions through their secure online accounts. One new tool allows members to update their beneficiary designations (previously a labor-intensive, paper-based process); the other allows retirees to conveniently set up and update direct (electronic) deposit of their benefit payments to their bank or credit union.
- Employer reporting: Work began this year on the first stage of modernizing the legacy systems that support DRS' core business functions. The first effort will replace the 20 -year-old system used by government employers to report member account and financial information to DRS.

These are a few of the many improvements taking place at DRS, all guided by our commitment to seeking feedback and using what we learn to meet and exceed customer expectations.

Since this is the last introduction I will make for the DRS CAFR, I'd like to take the opportunity to say thank you to everyone involved in the operation of Washington's retirement systems, which are consistently recognized among the best in the nation. I'd especially like to thank DRS members and retirees - the hundreds of thousands of men and women who have dedicated their careers to public service in support of the people of our state. You are very much appreciated.


## Marcie Frost <br> Director

## Washington State Department of Retirement Systems' Organization



Leadership Team Member
Special Reporting Requirements to the Director

## Pension System Roles and Responsibilities

| Pension System Roles and Responsibilities - Page 1 of 3 |  |  |
| :---: | :---: | :---: |
| Organization and Contact Information | Responsibility | Membership/Executive |
| Department of Retirement Systems <br> PO Box 48380 <br> Olympia, WA 98504-8380 <br> Phone: 360.664.7000 or 800.547.6657 <br> Website: www.drs.wa.gov | Collects and accounts for employer and employee contributions, maintains retirement records, pays benefits, communicates pension information, provides investment education, and administers the Deferred Compensation Program | Marcie Frost - Director (through 8/2016) <br> Tracy Guerin - Director (effective 9/2016) <br> (The governor appoints the director of DRS.) |
| Washington State Investment Board <br> PO Box 40916 <br> Olympia, WA 98504-0916 <br> Phone: 360.956.4600 Website: www.sib.wa.gov | Invests and accounts for pension funds | The board consists of 10 voting and five nonvoting members. <br> Voting members <br> James L. McIntire - State Treasurer <br> Rep. Timm Ormsby <br> Sen. Mike Hewitt <br> Marcie Frost (chair) - Director, Department of Retirement Systems <br> Joel Sacks - Director, Department of Labor and Industries <br> George Masten - Retired members <br> Kelly Fox (vice chair) - LEOFF <br> Arlista Holman - SERS <br> Judy Kuschel - PERS <br> Stephen Miller - TRS <br> Nonvoting members - investment professionals <br> William A. Longbrake <br> Richard Muhlebach <br> Robert S. Nakahara <br> David Nierenberg <br> Jeffrey T. Seely |
| Office of Financial Management <br> PO Box 43113 <br> Olympia, WA 98504-3113 <br> Phone: 360.902.0555 <br> Website: www.ofm.wa.gov | Advises the governor on pension and funding policies and issues | David Shumacher - Director <br> (The governor appoints the director of OFM.) |
| Office of the State Actuary <br> PO Box 40914 <br> Olympia, WA 98504-0914 <br> Phone: 360.786.6140 <br> Website: osa.leg.wa.gov | Acts as an advisory agency to the Legislature and to the director of DRS; performs actuarial studies and reports on retirement bills; and creates factors used to compute benefit payment adjustments that are based on early retirement, Cost-of-Living Adjustments or long term survivor benefits | Matt Smith - State Actuary <br> (The State Actuary Appointment Committee appoints the state actuary.) |
| Law Enforcement Officers' and Fire Fighters' Plan 2 Retirement Board <br> PO Box 40918 <br> Olympia, WA 98504-0918 <br> Phone: 360.586.2320 <br> Website: www.leoff.wa.gov | Policy-making board that studies pension issues, acts as fiduciary of LEOFF Plan 2, sets contribution rates and recommends pension policy to the Legislature for LEOFF Plan 2 members | Fire fighter representatives <br> Kelly Fox (chair) <br> Michael White <br> Mark Johnston <br> Law enforcement representatives <br> Rep. Jeff Holy (retired) <br> Wally Loucks <br> Jason Granneman <br> Employer representatives <br> David Cline <br> Dave Upthegrove <br> Paul Golnik <br> Legislators <br> Rep. Kevin Van De Wege <br> Sen. Judy Warnick |

## Pension System Roles and Responsibilities (cont.)

| Pension System Roles and Responsibilities - Page 2 of 3 |  |  |
| :---: | :---: | :---: |
| Organization and Contact Information | Responsibility | Membership/Executive |
| Select Committee on Pension Policy Contact through the Office of the State Actuary | Studies pension issues and retirement finances, develops pension policies, and recommends pension legislation | Legislators <br> Rep. Timm Ormsby <br> Rep. Bruce Chandler (vice chair) <br> Rep. Matt Manweller <br> Rep. Derek Stanford <br> Sen. Barbara Bailey <br> Sen. Steve Conway (chair) <br> Sen. Steve Hobbs <br> Sen. Mark Schoesler <br> Agency directors <br> David Schumacher - Office of Financial Management <br> Marcie Frost - Department of Retirement Systems <br> Retiree representatives <br> Bev Hermanson - PERS <br> Bob Thurston - WSPRS <br> Active member representatives <br> Randy Davis - TRS <br> Bob Keller - PERS <br> J. Pat Thompson - PERS <br> David Westberg - SERS <br> Employer representatives <br> John Boesenberg - PERS/Higher Education <br> Annette Creekpaum - PERS <br> Beverly Freeman - PERS |
| DRS Advisory Committee Contact through DRS | Serves in an advisory role to the director of DRS | PERS <br> Bev Hermanson - Retired Mary L. Sherman - Active <br> SERS <br> Jacques Meddles - Active Cheri Ingersoll - Retired <br> LEOFF <br> Mark J. Mears - Active <br> Richard Warbrouck - Retired <br> TRS <br> Nancy Baldwin - Retired (chair) <br> Darrell Heisler - Active <br> PSERS <br> William Copland - Active <br> WSPRS <br> Travis Matheson - Active <br> Rick Jensen - Retired (vice chair) <br> JRS <br> Judge Richard McDermott - Active <br> DCP <br> Kathy Whitlock - Participant <br> Defined contribution plan administration <br> Deirdre Walker - Weyerhaeuser |

## Pension System Roles and Responsibilities (cont.)

| Pension System Roles and Responsibilities - Page 3 of 3 |  |  |
| :---: | :---: | :---: |
| Organization and Contact Information | Responsibility | Membership/Executive |
| Pension Funding Council Contact through DRS | Adopts economic assumptions for pension funding and member and employer pension contribution rates for LEOFF Plan 1, PERS, PSERS, SERS, TRS and WSPRS | Legislators <br> Rep. Bruce Chandler - Ranking minority member, House Appropriations Committee <br> Rep. Timm Ormsby - Chair, House Appropriations Committee <br> Sen. Andy Hill - Chair, Senate Ways and Means Committee <br> Sen. Kevin Ranker - Ranking minority member, <br> Senate Ways and Means Committee <br> Agency directors <br> David Schumacher (chair) - Office of Financial Management <br> Marcie Frost - Department of Retirement Systems |
| Legislative Fiscal Committees <br> House Appropriations <br> Committee <br> P0 Box 40600 <br> Olympia, WA 98504-0600 | Reviews and reports on retirement bills to the full Legislature | The legislative fiscal committees are the House Appropriations Committee and the Senate Ways and Means Committee. |
| Senate Ways and Means Committee <br> PO Box 40482 <br> Olympia, WA 98504-0482 |  |  |
| Phone: 360.786.7155 <br> or 800.562.6000 <br> Website: www.leg.wa.gov |  |  |

## Letter of Transmittal



STATE OF WASHINGTON<br>DEPARTMENT<br>OF RETIREMENT SYSTEMS<br>PO Box 48380 • Olympia, WA 98504-8380

October 14, 2016

The Honorable Jay Inslee, Governor
Members of the Sixty-Fourth Legislature
Members of the Select Committee on Pension Policy
State of Washington
Olympia, WA 98504
We are pleased to present our Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2016. This report is intended to provide complete and reliable information that can be used to make management decisions and evaluate responsible stewardship of the retirement systems' funds.

This CAFR is also designed to comply with the requirements of RCW 41.50.050(4).

Responsibility for the accuracy of the data and the fairness and completeness of this presentation, including all disclosures, rests with the management of the Department of Retirement Systems (DRS). To the best of our knowledge, the enclosed information is accurate in all material respects and is reported in a manner designed to provide a fair representation of the financial position and results of the operations of the department.

CliftonLarsonAllen LLP, certified public accountants, have issued an unmodified ("clean") opinion on DRS' financial statements for the year ended June 30, 2016. The independent auditors' report is located at the beginning of the Financial Section of this CAFR.
"Management's Discussion and Analysis" (MD\&A) immediately follows the independent auditors' report and provides a narrative introduction, overview and analysis of the basic financial statements. The MD\&A complements this letter of transmittal and should be read in conjunction with it.

Agency Description
DRS was established to administer pension plans for state employees, teachers and classified educational employees, law enforcement officers and fire fighters, and other employees of participating political subdivisions. DRS was also given administrative responsibility for the state's Deferred Compensation Program.

As of June 30, 2016, 1,336 employers were covered, 153 of which were component units of the state.
They participate in the eight statewide retirement systems DRS administers. Those retirement systems are composed of 15 defined benefit plans, three of which include a defined contribution component.

Additionally, DRS is responsible for the accounting, reporting and collection of contributions for the Judicial Retirement Account (JRA), a defined contribution pension plan the Washington State Administrative Office of the Courts administers.

## Departmental Initiatives

DRS' activities are highlighted in the "Director's Message" on page 3 of this Introductory Section.

## Financial Reporting and Internal Control

 This CAFR has been prepared to conform to the principles of accounting and reporting established by the Governmental Accounting Standards Board (GASB). The basic financial statements are presented in accordance with guidelines established by GASB Statement No. 67, Financial Reporting for Pension Plans, and other authoritative accounting criteria. Specific accounting policies are detailed in the "Notes to the Financial Statements."DRS' management is responsible for establishing and

## Letter of Transmittal (cont.)

maintaining an internal control structure designed to protect the assets of the retirement systems from loss, theft and misuse and to compile reliable accounting data to allow for the preparation of financial statements in conformity with generally accepted accounting principles.

The internal control structure is designed to provide reasonable, but not absolute, assurance that these objectives are met. The concept of reasonable assurance recognizes that: (1) the cost of a control should not exceed the benefits likely to be derived and (2) the valuation of costs and benefits requires estimates and judgments.

## Funding

The intent of public pension funding in Washington is to provide a dependable and systematic process for financing the benefits the retirement systems provide. Measurement of funding status indicates how well that goal is being met.

There are two standard indicators of funding status: the funding ratio and the existence of an unfunded liability. Both measure the benefit obligations, or liabilities, of a plan against its assets. If the funding level is adequate, the ratio of total accumulated assets to total liabilities will be larger and more funds will be available for investment purposes. Also, an adequate funding level gives members assurance that their pension benefits are secure.

The actuarial value of assets available as of the latest actuarial date for all systems is $\$ 71.5$ billion. The accrued liability is $\$ 83.6$ billion.

The accrued liability exceeds the net actuarial value of assets available for benefits by $\$ 12$ billion. The ratio of assets to liabilities is $86 \%$, compared to $87 \%$ last year. Current contribution rates remain in keeping with the goal of attaining a funding ratio of $100 \%$ by the amortization dates applicable to each plan, as required by Chapter 41.45 RCW. Valuations are performed for DRS-administered retirement systems on a yearly (July 1 through June 30) basis. The Office of the State Actuary prepares these calculations. Additional actuarial information is included in the Actuarial Section of this CAFR.

## Investments

In accordance with RCW 43.33A.110, the Washington State Investment Board (WSIB) manages the pension trust fund porffolio to maximize return at a prudent level of risk.

The WSIB establishes asset allocation targets that constitute the board's view of a prudent and wellreasoned approach to the management of the entrusted funds. At any given time, the asset mix might deviate from the target; deviations greater than predetermined acceptable levels require rebalancing. The goal of rebalancing is to meet the target allocation within consideration of the other remaining asset classes.

Most pension funds are invested in the Commingled Trust Fund (CTF), a diversified pool of investments. For fiscal year 2016, the CTF investments provided a $2.7 \%$ rate of return. The annualized rate of return was $8.0 \%$ over the past three years and $7.5 \%$ over the past five years.

A listing of investment professionals who provide services to the WSIB begins on page 109 in the Investment Section of this CAFR. Further investment information is included in the Investment Section of this CAFR.

## Professional Award

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to DRS for its CAFR for the fiscal year ended June 30, 2015.

This was the 21 st consecutive year DRS has earned this prestigious award. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized report that satisfies both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe our current CAFR continues to meet the Certificate of Achievement program's requirements, and we are submitting it to the GFOA to determine its eligibility.

## Letter of Transmittal (cont.)

## Acknowledgments

This report was made possible by the team members of DRS, based in part on information provided by the Office of Financial Management, the Office of the State Actuary, the Office of the State Treasurer and the Washington State Investment Board. We appreciate their assistance.

We would also like to take this opportunity to acknowledge Marcie Frost, who concluded her service with DRS in August. Marcie served in numerous roles at DRS over the past 15 years, including the last four years as agency director. Her leadership set DRS on

## Significant Events in State Retirement History

 1930s-1940sPERS, TRS, WSPRS, JRF and many local police and fire fighters' retirement systems were created.

## 1970

Local police and fire fighters' retirement systems were consolidated into LEOFF.

## 1976

The Department of Retirement Systems was created to administer state retirement systems.

The Office of the State Actuary was created to provide pension cost estimates.

## 1977

LEOFF, PERS and TRS Plans 2 were created.

## 1981

The Washington State Investment Board was created to manage the investment of state trust funds.

## 1987

The Joint Committee on Pension Policy was established.

## 1995

TRS Plan 3 was created.
the path to high levels of customer satisfaction and team member engagement, a journey that continues today and into the future. Her service to DRS, public employees and the state of Washington is deeply appreciated.

Respectfully submitted,


Tracy Guerin Director

| Significant Events in State Retirement History |  |
| :---: | :---: |
| 1930s-1940s | 1996 |
| PERS, TRS, WSPRS, JRF and many local police and fire fighters' retirement systems were created. | The state Deferred Compensation Program (DCP) was transferred to DRS. |
| 1970 | DRS assumed accounting and reporting responsibility for JRA. |
| Local police and fire fighters' retirement systems were consolidated into LEOFF. | 1998 |
| 1976 | School Employees' Retirement System (SERS) Plans 2 and 3 were created. |
| The Department of Retirement Systems was created to administer state retirement systems. | The Pension Funding Council was created. |
| The Office of the State Actuary was created to | 2000 |
| provide pension cost estimates. | PERS Plan 3 was created. It became effective March 1 2002, for state and higher education employees and |
| 1977 | September 1, 2002, for local government employees. |
| LEOFF, PERS and TRS Plans 2 were created. |  |
|  | 2001 |
| 1981 | WSPRS Plan 2 was created. |
| The Washington State Investment Board was created to manage the investment of state trust funds. | 2003 |
|  | The LEOFF 2 Board was established. |
| 1987 | The Joint Committee on Pension Policy became the |
| The Joint Committee on Pension Policy was established. | Select Committee on Pension Policy. |
|  | 2004 |
| 1995 | The Public Safety Employees' Retirement System |
| TRS Plan 3 was created. | (PSERS) was created. |



Government Finance Officers Association

# Certificate of <br> Achievement for Excellence in Financial Reporting 

Presented to
Washington State
Department of Retirement Systems

For its Comprehensive Annual
Financial Report for the Fiscal Year Ended

June 30, 2015


Executive Director/CEO

## 2016 Washington State Legislative Actions

In 2016, the Washington state Legislature passed eight pension-related bills that Gov. Jay Inslee signed into law. These laws are described below.

## All Pension Systems

SB 5435: This law allows the automatic enrollment of new state employees in the Washington State Deferred Compensation Program (DCP) with a default contribution rate of $3 \%$. Employees will have the opportunity to opt out or set their own contribution rates. The law also gives DRS the option to offer a 401 (a) money-purchase retirement savings plan.

SB 6091: This law clarifies the definition of "slayer" to include people found not guilty by reason of insanity. A slayer isn't entitled to receive a retirement benefit from the person he or she killed.

## PERS

SB 6523: This law allows an employee providing emergency medical services to a consortium of local governments in Snohomish County to choose to establish service credit in PERS for service performed before July 23,2003 . The employee must pay both the employer and employee contributions, as DRS calculates, within five years of choosing to establish service credit.

## TRS

SB 6194: This law allows charter school employees to be members of the state retirement systems as long as DRS receives determination from the IRS that the inclusion of those employees won't jeopardize the status of the systems as government plans.

SB 6455: This law allows TRS members who retired using the 2008 Early Retirement Factors (ERFs) to return to work as substitute teachers for up to 867 hours without suspending their benefits. This provision is in effect from June 9, 2016, through July 31, 2020.

## LEOFF

SB 5873: This law gives a LEOFF Plan 1 retiree a chance to name as survivor a spouse he or she married after retiring. To qualify, the marriage needs to have spanned at least two years before Sept. 1, 2015.

SB 6263: This law impacts LEOFF Plan 2 members who are called into eligible federal service to respond to natural disasters or other federal emergencies. It provides them with benefit protections similar to the ones provided to members of the National Guard or military reserves who are called during a time of war.

LEOFF/WSPRS
SB 6264: This law allows retirees of LEOFF and WSPRS a six-month window to purchase annuities. The annuities may be purchased between January 1 and June 1, 2017.

## Financial Section

## 2016 Highlights

## Transition to single record keeper

2016 marked the culmination of two years of work in successfully transitioning to a single record keeper to serve the state's Plan 3 retirement systems and the Deferred Compensation Program.

The transition created immediate benefits for Plan 3 and DCP customers by providing "one-stop" access to their accounts and comprehensive retirement planning information, both online and on the phone.

For the long term, the unified approach to recordkeeping services will bring a progression of products and enhancements that will provide personalized retirement readiness tools and services for all DRS customers.


## Financial Section

# INDEPENDENT AUDITORS' REPORT 

Ms. Tracy Guerin, Director<br>Washington State Department of Retirement Systems<br>Olympia, Washington

## Report on the Financial Statements

We have audited the accompanying financial statements (including the individual fund financial statements) of the Washington State Department of Retirement Systems (DRS), which comprise the statement of fiduciary net position as of June 30, 2016, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements.

## Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

## Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, DRS' fiduciary net position as of June 30, 2016, and the changes in its fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America. Also, in our opinion, the financial statements present fairly in all material respects, the fiduciary net position of each of the individual funds of DRS as of June 30, 2016, and the changes in fiduciary net position of such funds for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

## Independent Auditors' Report (cont.)

## Report on Summarized Comparative Information

We have previously audited the DRS' 2015 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated October 15, 2015. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2015 is consistent, in all material respects, with the audited financial statements from which it has been derived.

## Other Matters

## Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, the Required Supplementary Schedules of Changes in Net Pension Liability, Net Pension Liability, Employer Contributions and Investment Returns and the related Notes to Required Supplementary Information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the DRS' basic financial statements. The Schedules of Administrative Expenses, Investment Expenses - Pension Trust Funds and Payments to Consultants (Supporting Schedules), as listed in the table of contents, are presented for the purpose of additional analysis and are not a required part of the financial statements.

The Supporting Schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the financial statements as a whole.

The Introductory, Investment, Actuarial and Statistical Sections, as listed in the table of contents, have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on them.


## CliftonLarsonAllen LLP

Baltimore, Maryland<br>October 14, 2016

## Management's Discussion and Analysis

This discussion and analysis provides an overview of financial activities of the Washington State Department of Retirement Systems (DRS) for the fiscal year ended June 30, 2016. Please read it in conjunction with the "Letter of Transmittal," beginning on page 8, and the financial statements, beginning on page 20.

## Financial Highlights

- The overall financial position of DRS improved during the year; the fiduciary net position of all the pension funds increased $\$ 1,018.0$ million.
- The covered payroll requiring both employee and employer pension contributions reported during the year totaled $\$ 18,781$. 1 million, representing a $5.6 \%$ increase over the previous year.
- Employer contributions totaled $\$ 2,025.9$ million, and member contributions (including restorations) totaled $\$ 1,342.6$ million, representing increases of $26 \%$ and $17 \%$, respectively, over the previous fiscal year.
- Net investment earnings (net appreciation/ depreciation in the fair value of investments plus interest and dividend income less investment expenses) decreased $\$ 1,760.2$ million to \$1,967.2 million.
- Pension benefits paid to retirees and beneficiaries increased $\$ 204.8$ million, bringing the total benefit payments to $\$ 3,856.5$ million. Refunds of contributions paid to former retirement system members increased $1 \%$ to $\$ 740.3$ million.
- Administrative expenses totaled $\$ 35.6$ million and represented a $12 \%$ increase over the last fiscal year.


## Overview of the Financial Statements

DRS' financial statements consist of the following components: basic financial statements, notes to the financial statements, required supplementary information and other supporting schedules.

Basic Financial Statements: The basic financial statements are fund financial statements and include a "Statement of Fiduciary Net Position" and a "Statement of Changes in Fiduciary Net Position." The fiduciary funds include defined benefit and defined contribution
pension trust funds and the Deferred Compensation Program trust fund.

The "Statement of Fiduciary Net Position" reports the assets, liabilities and resulting net position available for pension and other benefits as of June 30, 2016. The "Statement of Changes in Fiduciary Net Position" reports the additions to, deductions from and resulting change in fiduciary net position for the fiscal year.

Notes to the Financial Statements: The notes to the financial statements are an integral part of the financial statements and include additional information not readily evident in the statements. Note 1 provides a summary of significant accounting policies and plan asset matters. Note 2 provides a general description of each retirement plan and includes membership information, employer net pension liability and actuarial assumptions.

## Required Supplementary Information

 Two years of financial statements alone might not provide sufficient information to properly evaluate the long-term financial position of the plans. The required supplementary information enhances that perspective and consists of four schedules built prospectively to present 10-year historical trends.The "Schedule of Net Pension Liability" presents each pension plan's net pension liability. The "Schedule of Changes in Net Pension Liability" include current fiscal year and prior fiscal year information about the changes in the net pension liability of each pension plan. The "Schedule of Investment Returns" presents the annual money-weighted rate of return, net of investment expense, for each pension plan. The "Schedule of Contributions" presents information about the annual required contributions of employers, the contributions made in relation to that requirement, covered employee payroll and the contributions as a percentage of covered payroll.

## Supporting Schedules and Other Financial Information

The supporting schedules provide additional detailed information that is useful in evaluating the condition of the plans DRS administers.

## Management's Discussion and Analysis (cont.)

These schedules include information on administrative expenses, investment expenses and payments to consultants.

## Financial Analysis of DRS Funds

| Analysis of Fiduciary Net Position Dollars in Millions |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiduciary Net Position |  | Fiscal Year 2016 |  | Fiscal Year 2015 |  | Increase <br> Decrease) <br> Amount | Increase (Decrease) Percentage |
| Assets |  |  |  |  |  |  |  |
| Cash and Pooled Investments | \$ | 42.8 | \$ | 40.8 | \$ | 2.0 | 5.0\% |
| Receivables |  | 3,470.3 |  | 2,641.3 |  | 829.0 | 31.0\% |
| Capital Assets, Net of Depreciation |  | 0.2 |  | 0.2 |  | - | 0.0\% |
| Investments, Noncurrent |  | 90,648.2 |  | 90,284.2 |  | 364.0 | 0.4\% |
| Other Assets |  | 1.4 |  | 1.3 |  | 0.1 | 8.0\% |
| Total Assets |  | 94,162.9 |  | 92,967.8 |  | 1,195.1 | 1.0\% |
| Liabilities |  |  |  |  |  |  |  |
| Obligations Under Securities Lending Agreements |  | 683.1 |  | 843.1 |  | (160.0) | (19.0)\% |
| Other Short-Term Liabilities |  | 2,986.0 |  | 2,648.9 |  | 337.1 | 13.0\% |
| Long-Term Obligations |  | 1.4 |  | 1.4 |  | - | 0.0\% |
| Total Liabilities |  | 3,670.5 |  | 3,493.4 |  | 177.1 | 5.0\% |
| Fiduciary Net Position | \$ | 90,492.4 | \$ | 89,474.4 | \$ | 1,018.0 | 1.0\% |

The fiduciary net position increased by $\$ 1,018.0$ million in fiscal year 2016 and totaled $\$ 90,492.4$ million at fiscal year-end. The increase was mostly due to investment returns and an increase of employer and employee contributions during the fiscal year.

Total trust-fund assets as of June 30, 2016, were $\$ 94,162.9$ million, representing an increase of $\$ 1,195.1$ million, or $1 \%$ over the previous fiscal year. The trust-fund asset growth was primarily due to investment returns and the contribution rate increase during the fiscal year, which resulted in a substantial increase to receivables. Total investments increased by $\$ 364.0$ million, or $0.4 \%$. Total trust-fund liabilities as of June 30,2016 , were $\$ 3,670.5$ million, representing an increase of $\$ 177.1$ million, or $5 \%$, over the previous year. The increase in liabilities is mostly atributable to
pending investment trades.
Analysis of Changes in Fiduciary Net Position
Dollars in Millions

| Changes in Fiduciary Net Position |  | Fiscal Year 2016 |  | Fiscal Year 2015 | Increase (Decrease) Amount | Increase (Decrease) Percentage |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions |  |  |  |  |  |  |
| Employer Contributions | \$ | 2,025.9 | \$ | 1,611.1 | \$ 414.8 | 26.0\% |
| Member Contributions |  | 1,342.6 |  | 1,146.5 | 196.1 | 17.0\% |
| State Contributions |  | 70.4 |  | 68.9 | 1.5 | 2.0\% |
| Participant Contributions |  | 213.5 |  | 208.4 | 5.1 | 2.0\% |
| Net Investment Income (Loss) |  | 1,967.2 |  | 3,727.4 | $(1,760.2)$ | (47.0)\% |
| Charges for Services |  | 36.8 |  | 34.4 | 2.4 | 7.0\% |
| Transfers from Other Pension Plans |  | 5.9 |  | 4.8 | 1.1 | 23.0\% |
| Total Additions |  | 5,662.3 |  | 6,801.5 | $(1,139.2)$ | (17.0)\% |
| Deductions |  |  |  |  |  |  |
| Benefits |  | 3,856.5 |  | 3,651.7 | 204.8 | 6.0\% |
| Refunds of Contributions |  | 740.3 |  | 731.7 | 8.6 | 1.0\% |
| Transfers to Other Pension Plans |  | 5.9 |  | 4.8 | 1.1 | 23.0\% |
| Transfers to Other Funds |  | 6.0 |  | - | 6.0 | 100.0\% |
| Administrative Expenses |  | 35.6 |  | 31.7 | 3.9 | 12.0\% |
| Total Deductions |  | 4,644.3 |  | 4,419.9 | 224.4 | 5.0\% |
| Net Increase/ (Decrease) |  | 1,018.0 |  | 2,381.6 | $(1,363.6)$ | (57.0)\% |
| Fiduciary Net Position: July 1 |  | 89,474.4 |  | 87,092.8 | 2,381.6 | 3.0\% |
| Fiduciary Net Position: June 30 | \$ | 90,492.4 | \$ | 89,474.4 | \$ 1,018.0 | 1.0\% |

Additions to the retirement trust funds primarily consist of contributions from employers, active system members and the state and investment earnings. Additions to the deferred compensation trust fund consist of participant contributions and investment earnings.

Total trust-fund additions (excluding plan transfers) for fiscal year 2016 totaled $\$ 5,656.4$ million, a decrease of $\$ 1,140.3$ million from fiscal year 2015. This was primarily due to the $\$ 1,760.2$ million decrease in net income from investment activities. The investment performance yielded a $2.7 \%$ total return for the retirement funds' Commingled Trust Fund (CTF), compared to the $4.9 \%$ return of the previous year.

[^0]
## Management's Discussion and Analysis (cont.)

Employer contributions increased $\$ 414.8$ million, or $26 \%$, and totaled $\$ 2,025.9$ million. This increase was the result of increased employment, salaries, and employer and employee contribution rates. Total covered payroll was \$18,781.1 million and represented a $5.6 \%$ increase over the previous year.

Member contributions include both regular and restoration contributions as well as service credit purchases. Total contributions increased $\$ 196.1$ million, or $17 \%$, over the previous year and totaled $\$ 1,342.6$ million for fiscal year 2016.

- Regular member contributions increased $\$ 186.9$ million to $\$ 1,277.7$ million and reflected increased employment, salaries and member contribution rates.
- Other contributions increased $\$ 9.3$ million to $\$ 64.9$ million during the current year.

State contributions increased $\$ 1.5$ million to $\$ 70.4$ million in fiscal year 2016. The increase was in state general-fund allocations for Plan 2 of the Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF), which moved from $\$ 58.3$ million to $\$ 60.4$ million. State contributions to the Judicial Retirement System (JRS) decreased to $\$ 9.5$ million, and the Judges' Retirement Fund (JRF) received $\$ 0.5$ million during the current year.

Participant contributions to the Deferred Compensation Program (DCP) increased $2 \%$ over the prior year and totaled $\$ 213.5$ million in fiscal year 2016. As of June 30, 2016, the number of active and contributing DCP participants was 37,663 and represented an increase of 834 , or $2 \%$ over the previous year.

Transfers from and to other pension plans was at $\$ 5.9$ million in fiscal year 2016 . Other additions increased by $\$ 0.01$ million to $\$ 0.08$ million in fiscal year 2016.

Deductions to the retirement trust funds consist of the payment of benefits to retirees and beneficiaries, the refund of contributions to former retirement system members, and the cost of administering the retirement systems. Benefit payments to members include both pension and annuity benefits.

Deductions to the deferred compensation trust fund consist of payments to plan participants and administrative expenses.

Expenses incurred by the Washington State Investment Board (WSIB) for the investment of trust funds are funded from earnings on investments.

Total trust fund deductions (excluding plan transfers) for fiscal year 2016 were $\$ 4,638.3$ million, an increase of $\$ 218.4$ million, or $5 \%$, over fiscal year 2015 . This growth resulted primarily from an increase in benefits paid to retirees and beneficiaries. Benefit payments increased $\$ 204.8$ million, or $6 \%$, due to an increase in the number of retirees during the year, the annual cost-of-living adjustments that increased benefit payouts and the higher salaries of those newly retired.

Total refunds for fiscal year 2016 were $\$ 740.3$ million, representing an $\$ 8.6$ million increase from the previous year. Of this increase, $\$ 18.5$ million can be attributed to employees withdrawing their plan contributions upon terminating public employment and a $\$ 9.9$ million decrease can be attributed to reduced distributions from DCP for mandatory distributions and other withdrawals from program participants.

## Capital Assets

DRS' investment in capital assets includes furnishings, equipment and improvements other than buildings. As of June 30, 2016, total investment was $\$ 2.5$ million, with accumulated depreciation of $\$ 2.3$ million, leaving a net book value of $\$ 0.2$ million. Additional information can be found in Note 1 to the financial statements.

## Other Long-Term Obligations

At year-end, DRS had \$1.4 million in outstanding general long-term obligations. These long-term obligations represent DRS' liability for employees' accumulated annual and sick leave. More information can be found in Note 1 to the financial statements.

## Contacting DRS' Financial Management

This CAFR is designed to provide a general overview of DRS' finances. If you have questions about this report or need more information, contact DRS at PO Box 48380, Olympia, WA 98504-8380.

## Statement of Fiduciary Net Position

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 — Page 1 of 4

| Dollars in Thousands | Pension Trust |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS <br> Plan 1 |  | $\begin{array}{r} \text { PERS } \\ \text { Plan } 2 / 3 \end{array}$ |  | PERS Plan 3 <br> Defined <br> Contribution |  | $\begin{array}{r} \text { SERS } \\ \text { Plan } 2 / 3 \end{array}$ |  | SERS Plan 3 <br> Defined <br> Contribution |  |
| Assets |  |  |  |  |  |  |  |  |  |  |
| Cash and Pooled Investments | \$ | 3,072 | \$ | 7,319 | \$ | 308 | \$ | 2,764 | \$ | 1,147 |
| Receivables |  |  |  |  |  |  |  |  |  |  |
| Due from Other Governments |  | 3,560 |  | 72,336 |  | 5,525 |  | 14,956 |  | 5,833 |
| Member Accounts Receivable (Net of Allowance) |  | 588 |  | 261 |  | - |  | 15 |  | - |
| Interest and Dividends |  | 26,104 |  | 111,965 |  | 5,444 |  | 15,489 |  | 4,670 |
| Investments Trades Pending Receivable - Short Term |  | 243,085 |  | 1,044,125 |  | 50,756 |  | 144,394 |  | 43,547 |
| Due from Pension Funds |  | 43,940 |  | 2,071 |  | - |  | 558 |  | - |
| Due from Other Washington State Agencies |  | 3 |  | 3 |  | - |  | - |  | - |
| Total Receivables |  | 317,280 |  | 1,230,761 |  | 61,725 |  | 175,412 |  | 54,050 |
| Capital Assets, Net of Depreciation |  | 46 |  | 42 |  | - |  | 8 |  | - |
| Investments |  |  |  |  |  |  |  |  |  |  |
| Equity in CTF |  | 6,897,925 |  | 29,614,802 |  | 1,439,619 |  | 4,095,562 |  | 1,235,055 |
| Liquidity |  | 157,790 |  | 698,273 |  | 41,268 |  | 100,934 |  | 33,265 |
| Other Noncurrent Investments |  | - |  | - |  | 991,774 |  | - |  | 425,680 |
| Collateral Held Under Securities Lending Agreements |  | 59,004 |  | 251,928 |  | 12,224 |  | 34,922 |  | 10,487 |
| Total Investments |  | 7,114,719 |  | 30,565,003 |  | 2,484,885 |  | 4,231,418 |  | 1,704,487 |
| Other Assets |  | 333 |  | 310 |  | - |  | 56 |  | - |
| Total Assets |  | 7,435,450 |  | 31,803,435 |  | 2,546,918 |  | 4,409,658 |  | 1,759,684 |
| Liabilities |  |  |  |  |  |  |  |  |  |  |
| Obligations Under Securities Lending Agreements |  | 59,004 |  | 251,928 |  | 12,224 |  | 34,922 |  | 10,487 |
| Accounts Payable |  | 1,709 |  | 5,804 |  | 4,811 |  | 797 |  | 4,387 |
| Investment Trades Pending Payable - Short Term |  | 239,094 |  | 1,028,982 |  | 47,923 |  | 142,026 |  | 42,829 |
| Due to Other Governments |  | 5,963 |  | 3,516 |  | - |  | 752 |  | - |
| Due to Pension Funds |  | 7 |  | 27,233 |  | 1,545 |  | 16,566 |  | 463 |
| Due to Washington State Agencies |  | 106 |  | 102 |  | - |  | 13 |  | - |
| Other Short-Term Liabilities |  | - |  | 9 |  | - |  | 15 |  | - |
| Other Long-Term Obligations |  | 333 |  | 310 |  | - |  | 56 |  | - |
| Accrued Salaries |  | 173 |  | 163 |  | - |  | 29 |  | - |
| Unearned Revenues |  | 56 |  | 336 |  | - |  | 1 |  | - |
| Total Liabilities |  | 306,445 |  | 1,318,383 |  | 66,503 |  | 195,177 |  | 58,166 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |
| Pension Plans |  | 7,129,005 |  | 30,485,052 |  | 2,480,415 |  | 4,214,481 |  | 1,701,518 |
| DCP |  | - |  | - |  | - |  | - |  | - |
| Total Fiduciary Net Position | \$ | 7,129,005 | \$ | 30,485,052 | \$ | 2,480,415 | \$ | 4,214,481 | \$ | 1,701,518 |

The accompanying notes are an integral part of this statement.

## Statement of Fiduciary Net Position (cont.)

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 — Page 2 of 4

| Dollars in Thousands | Pension Trust |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PSERS <br> Plan 2 |  | TRS <br> Plan 1 |  | $\begin{array}{r} \text { TRS } \\ \text { Plan } 2 / 3 \end{array}$ |  | TRS Plan 3 <br> Defined Contribution |  | $\begin{aligned} & \text { LEOFF } \\ & \text { Plan } 1 \end{aligned}$ |  |
| Assets |  |  |  |  |  |  |  |  |  |  |
| Cash and Pooled Investments | \$ | 568 | \$ | 2,634 | \$ | 4,231 | \$ | 5,125 | \$ | 1,856 |
| Receivables |  |  |  |  |  |  |  |  |  |  |
| Due from Other Governments |  | 2,443 |  | 1,089 |  | 40,796 |  | 26,201 |  | 411 |
| Member Accounts Receivable (Net of Allowance) |  | - |  | 172 |  | 110 |  | - |  | 186 |
| Interest and Dividends |  | 1,456 |  | 20,238 |  | 39,861 |  | 16,681 |  | 19,771 |
| Investments Trades Pending Receivable - Short Term |  | 13,570 |  | 188,448 |  | 371,608 |  | 155,527 |  | 184,268 |
| Due from Pension Funds |  | 5 |  | 98,607 |  | 2,505 |  | - |  | 266 |
| Due from Other Washington State Agencies |  | - |  | 2 |  | 1 |  | - |  | 1 |
| Total Receivables |  | 17,474 |  | 308,556 |  | 454,881 |  | 198,409 |  | 204,903 |
| Capital Assets, Net of Depreciation |  | - |  | 40 |  | 23 |  | - |  | 22 |
| Investments |  |  |  |  |  |  |  |  |  |  |
| Equity in CTF |  | 388,300 |  | 5,349,038 |  | 10,539,999 |  | 4,411,245 |  | 5,228,445 |
| Liquidity |  | 8,809 |  | 122,325 |  | 269,330 |  | 124,737 |  | 119,611 |
| Other Noncurrent Investments |  | - |  | - |  | - |  | 2,792,850 |  | - |
| Collateral Held Under Securities Lending Agreements |  | 3,288 |  | 45,731 |  | 89,837 |  | 37,455 |  | 44,528 |
| Total Investments |  | 400,397 |  | 5,517,094 |  | 10,899,166 |  | 7,366,287 |  | 5,392,584 |
| Other Assets |  | 3 |  | 288 |  | 170 |  | - |  | 157 |
| Total Assets |  | 418,442 |  | 5,828,612 |  | 11,358,471 |  | 7,569,821 |  | 5,599,522 |
| Liabilities |  |  |  |  |  |  |  |  |  |  |
| Obligations Under Securities Lending Agreements |  | 3,288 |  | 45,731 |  | 89,837 |  | 37,455 |  | 44,528 |
| Accounts Payable |  | 73 |  | 1,238 |  | 2,062 |  | 10,068 |  | 1,378 |
| Investment Trades Pending Payable - Short Term |  | 13,348 |  | 185,354 |  | 365,506 |  | 152,973 |  | 181,243 |
| Due to Other Governments |  | 2 |  | 6,011 |  | 1,516 |  | - |  | 1 |
| Due to Pension Funds |  | 983 |  | 5 |  | 98,838 |  | 2,216 |  | 4 |
| Due to Washington State Agencies |  | 2 |  | 66 |  | 41 |  | - |  | 37 |
| Other Short-Term Liabilities |  | - |  | - |  | 31 |  | - |  | - |
| Other Long-Term Obligations |  | 3 |  | 288 |  | 170 |  | - |  | 157 |
| Accrued Salaries |  | 2 |  | 148 |  | 87 |  | - |  | 80 |
| Unearned Revenues |  | - |  | 500 |  | 123 |  | - |  | - |
| Total Liabilities |  | 17,701 |  | 239,341 |  | 558,211 |  | 202,712 |  | 227,428 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |
| Pension Plans |  | 400,741 |  | 5,589,271 |  | 10,800,260 |  | 7,367,109 |  | 5,372,094 |
| DCP |  | - |  | - |  | - |  | - |  | - |
| Total Fiduciary Net Position | \$ | 400,741 | \$ | 5,589,271 | \$ | 10,800,260 | \$ | 7,367,109 | \$ | 5,372,094 |

The accompanying notes are an integral part of this statement.

## Statement of Fiduciary Net Position (cont.)

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 - Page 3 of 4

| Dollars in Thousands | Pension Trust |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEOFF Plan 2 |  | WSPRS <br> Plan 1/2 |  | JRS |  |  | JRF |
| Assets |  |  |  |  |  |  |  |  |
| Cash and Pooled Investments | \$ | 2,104 | \$ | 829 | \$ | 6,807 | \$ | 585 |
| Receivables |  |  |  |  |  |  |  |  |
| Due from Other Governments |  | 15,207 |  | 546 |  | - |  | - |
| Member Accounts Receivable (Net of Allowance) |  | 72 |  | 1 |  | 2 |  | - |
| Interest and Dividends |  | 37,480 |  | 4,038 |  | 6 |  | - |
| Investments Trades Pending Receivable - Short Term |  | 349,500 |  | 37,635 |  | - |  | - |
| Due from Pension Funds |  | 161 |  | 32 |  | - |  | - |
| Due from Other Washington State Agencies |  | 1 |  | - |  | - |  | - |
| Total Receivables |  | 402,421 |  | 42,252 |  | 8 |  | - |
| Capital Assets, Net of Depreciation |  | 13 |  | 3 |  | - |  | - |
| Investments |  |  |  |  |  |  |  |  |
| Equity in CTF |  | 9,927,219 |  | 1,068,266 |  | - |  | - |
| Liquidity |  | 226,500 |  | 24,430 |  | - |  | - |
| Other Noncurrent Investments |  | - |  | - |  | - |  | - |
| Collateral Held Under Securities Lending Agreements |  | 84,304 |  | 9,110 |  | 222 |  | 19 |
| Total Investments |  | 10,238,023 |  | 1,101,806 |  | 222 |  | 19 |
| Other Assets |  | 95 |  | 19 |  | - |  | - |
| Total Assets |  | 10,642,656 |  | 1,144,909 |  | 7,037 |  | 604 |
| Liabilities |  |  |  |  |  |  |  |  |
| Obligations Under Securities Lending Agreements |  | 84,304 |  | 9,110 |  | 222 |  | 19 |
| Accounts Payable |  | 2,432 |  | 226 |  | 1 |  | - |
| Investment Trades Pending Payable - Short Term |  | 343,761 |  | 37,018 |  | - |  | - |
| Due to Other Governments |  | 29 |  | 229 |  | 30 |  | 2 |
| Due to Pension Funds |  | 276 |  | 9 |  | - |  | - |
| Due to Washington State Agencies |  | 33 |  | 5 |  | - |  | - |
| Other Short-Term Liabilities |  | - |  | - |  | - |  | - |
| Other Long-Term Obligations |  | 95 |  | 19 |  | - |  | - |
| Accrued Salaries |  | 53 |  | 10 |  | - |  | - |
| Unearned Revenues |  | 313 |  | 8 |  | - |  | - |
| Total Liabilities |  | 431,296 |  | 46,634 |  | 253 |  | 21 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Pension Plans |  | 10,211,360 |  | 1,098,275 |  | 6,784 |  | 583 |
| DCP |  | - |  | - |  | - |  | - |
| Total Fiduciary Net Position | \$ | 10,211,360 | \$ | 1,098,275 | \$ | 6,784 | \$ | 583 |

The accompanying notes are an integral part of this statement.

## Statement of Fiduciary Net Position (cont.)

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 — Page 4 of 4

| Dollars in Thousands | Pension Trust |  |  |  | June 30, 2016 |  | TotalsJune 30, 2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | JRA Defined Contribution |  | Deferred Compensation Program |  |  |  |  |  |
| Assets |  |  |  |  |  |  |  |  |
| Cash and Pooled Investments | \$ | 9 | \$ | 3,392 | \$ | 42,750 |  | 40,779 |
| Receivables |  |  |  |  |  |  |  |  |
| Due from Other Governments |  | - |  | - |  | 188,903 |  | 175,762 |
| Member Accounts Receivable (Net of Allowance) |  | 2 |  | 2,144 |  | 3,553 |  | 3,755 |
| Interest and Dividends |  | - |  | 2 |  | 303,205 |  | 229,634 |
| Investments Trades Pending Receivable - Short Term |  | - |  | - |  | 2,826,463 |  | 2,178,827 |
| Due from Pension Funds |  | - |  | - |  | 148,145 |  | 53,192 |
| Due from Other Washington State Agencies |  | - |  | - |  | 11 |  | 157 |
| Total Receivables |  | 2 |  | 2,146 |  | 3,470,280 |  | 2,641,327 |
| Capital Assets, Net of Depreciation |  | - |  | - |  | 197 |  | 210 |
| Investments |  |  |  |  |  |  |  |  |
| Equity in CTF |  | - |  | - |  | 80,195,475 |  | 79,714,373 |
| Liquidity |  | - |  | - |  | 1,927,272 |  | 1,908,916 |
| Other Noncurrent Investments |  | 11,039 |  | 3,621,024 |  | 7,842,367 |  | 7,817,770 |
| Collateral Held Under Securities Lending Agreements |  | - |  | 110 |  | 683,169 |  | 843,162 |
| Total Investments |  | 11,039 |  | 3,621,134 |  | 90,648,283 |  | 90,284,221 |
| Other Assets |  | - |  | - |  | 1,431 |  | 1,353 |
| Total Assets |  | 11,050 |  | 3,626,672 |  | 94,162,941 |  | 92,967,890 |
| Liabilities |  |  |  |  |  |  |  |  |
| Obligations Under Securities Lending Agreements |  | - |  | 110 |  | 683,169 |  | 843,162 |
| Accounts Payable |  | - |  | 567 |  | 35,553 |  | 32,358 |
| Investment Trades Pending Payable - Short Term |  | - |  | - |  | 2,780,057 |  | 2,542,543 |
| Due to Other Governments |  | - |  | - |  | 18,051 |  | 17,103 |
| Due to Pension Funds |  | - |  | - |  | 148,145 |  | 53,192 |
| Due to Washington State Agencies |  | - |  | 11 |  | 416 |  | 541 |
| Other Short-Term Liabilities |  | - |  | 1,546 |  | 1,601 |  | 1,435 |
| Other Long-Term Obligations |  | - |  | - |  | 1,431 |  | 1,353 |
| Accrued Salaries |  | - |  | 47 |  | 792 |  | 724 |
| Unearned Revenues |  | - |  | - |  | 1,337 |  | 1,026 |
| Total Liabilities |  | - |  | 2,281 |  | 3,670,552 |  | 3,493,437 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Pension Plans |  | 11,050 |  | - |  | 86,867,998 |  | 85,860,530 |
| DCP |  | - |  | 3,624,391 |  | 3,624,391 |  | 3,613,923 |
| Total Fiduciary Net Position | \$ | 11,050 | \$ | 3,624,391 | \$ | $\mathbf{9 0 , 4 9 2 , 3 8 9}$ | \$ | 89,474,453 |

The accompanying notes are an integral part of this statement.

## Statement of Changes in Fiduciary Net Position

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 — Page 1 of 4

| Dollars in Thousands | Pension Trust |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS <br> Plan 1 |  |  PERS Plan 3 <br> PERS Defined <br> Plan 2/3 Contribution |  |  |  | $\begin{array}{r} \text { SERS } \\ \text { Plan } 2 / 3 \end{array}$ |  | SERS Plan 3 Defined Contribution |  |
| Additions |  |  |  |  |  |  |  |  |  |  |
| Retirement Contributions |  |  |  |  |  |  |  |  |  |  |
| Employer | \$ | 595,982 | \$ | 563,328 | \$ | - | \$ | 115,480 | \$ | - |
| Plan Member |  | 13,663 |  | 472,528 |  | 119,988 |  | 45,946 |  | 67,713 |
| State |  | - |  | - |  | - |  | - |  | - |
| Plan Member Restorations |  | 4,794 |  | 24,745 |  | - |  | 1,209 |  | - |
| Total Retirement Contributions |  | 614,439 |  | 1,060,601 |  | 119,988 |  | 162,635 |  | 67,713 |
| Participant Contributions |  | - |  | - |  | - |  | - |  | - |
| Investment Income |  |  |  |  |  |  |  |  |  |  |
| Net Appreciation (Depreciation) in Fair Value of Investments |  | 21,749 |  | 168,034 |  | 8,847 |  | 23,541 |  | 8,107 |
| Interest and Other Investment Income |  | 117,349 |  | 482,056 |  | 25,493 |  | 66,448 |  | 21,149 |
| Dividends |  | 46,465 |  | 192,607 |  | 9,340 |  | 26,580 |  | 8,061 |
| Less: Investment Expenses |  | $(29,313)$ |  | $(120,667)$ |  | $(6,651)$ |  | $(16,834)$ |  | $(5,290)$ |
| Subtotal Net Investment Income/(Loss) |  | 156,250 |  | 722,030 |  | 37,029 |  | 99,735 |  | 32,027 |
| Securities Lending Income |  |  |  |  |  |  |  |  |  |  |
| Securities Lending Income |  | 1,223 |  | 5,048 |  | 245 |  | 696 |  | 213 |
| Less: Costs of Lending Securities |  | (390) |  | $(1,602)$ |  | (78) |  | (220) |  | (69) |
| Net Securities Lending Income |  | 833 |  | 3,446 |  | 167 |  | 476 |  | 144 |
| Total Net Investment Income/(Loss) |  | 157,083 |  | 725,476 |  | 37,196 |  | 100,211 |  | 32,171 |
| Charges for Services |  | 2,830 |  | 12,702 |  | 375 |  | 2,019 |  | 330 |
| Transfers from Other Pension Plans |  | 117 |  | 360 |  | 2,165 |  | 27 |  | 1,102 |
| Miscellaneous |  | 6 |  | 30 |  | - |  | 5 |  | - |
| Total Additions |  | 774,475 |  | 1,799,169 |  | 159,724 |  | 264,897 |  | 101,316 |
| Deductions |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 1,198,836 |  | 776,213 |  | - |  | 112,753 |  | - |
| Contribution Refunds |  | 4,373 |  | 36,302 |  | 92,444 |  | 2,494 |  | 85,019 |
| Annuity Payments |  | - |  | - |  | 4,112 |  | - |  | 2,610 |
| Transfers to Other Pension Plans |  | 27 |  | 2,463 |  | 567 |  | 833 |  | 311 |
| Transfers to Other Funds |  | 493 |  | 2,277 |  | - |  | 409 |  | - |
| Administrative Expenses |  | 2,819 |  | 12,023 |  | 375 |  | 1,782 |  | 330 |
| Total Deductions |  | 1,206,548 |  | 829,278 |  | 97,498 |  | 118,271 |  | 88,270 |
| Net Increase (Decrease) |  | $(432,073)$ |  | 969,891 |  | 62,226 |  | 146,626 |  | 13,046 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year: July 1 |  | 7,561,078 |  | 29,515,161 |  | 2,418,189 |  | 4,067,855 |  | 1,688,472 |
| End of Year: June 30 | \$ | 7,129,005 | \$ | 30,485,052 | \$ | 2,480,415 | \$ | 4,214,481 | \$ | 1,701,518 |

[^1]
## Statement of Changes in Fiduciary Net Position (cont.)

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 — Page 2 of 4

| Dollars in Thousands | Pension Trust |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PSERS <br> Plan 2 |  | TRS Plan 1 |  | $\begin{array}{r} \text { TRS } \\ \text { Plan } 2 / 3 \end{array}$ |  | TRS Plan 3 <br> Defined <br> Contribution |  |  | $\begin{aligned} & \text { LEOFF } \\ & \text { Plan } 1 \end{aligned}$ |
| Additions |  |  |  |  |  |  |  |  |  |  |
| Retirement Contributions |  |  |  |  |  |  |  |  |  |  |
| Employer | \$ | 20,058 | \$ | 315,934 | \$ | 316,022 | \$ | - | \$ | - |
| Plan Member |  | 21,134 |  | 5,059 |  | 64,263 |  | 309,813 |  | - |
| State |  | - |  | - |  | - |  | - |  | - |
| Plan Member Restorations |  | 14 |  | 3,743 |  | 4,324 |  | - |  | 837 |
| Total Retirement Contributions |  | 41,206 |  | 324,736 |  | 384,609 |  | 309,813 |  | 837 |
| Participant Contributions |  | - |  | - |  | - |  | - |  | - |
| Investment Income |  |  |  |  |  |  |  |  |  |  |
| Net Appreciation (Depreciation) in Fair Value of Investments |  | 3,108 |  | 11,783 |  | 63,006 |  | 39,620 |  | 19,273 |
| Interest and Other Investment Income |  | 6,028 |  | 92,454 |  | 171,196 |  | 75,414 |  | 88,086 |
| Dividends |  | 2,421 |  | 36,519 |  | 68,027 |  | 28,752 |  | 34,974 |
| Less: Investment Expenses |  | $(1,504)$ |  | $(23,105)$ |  | $(43,337)$ |  | $(20,155)$ |  | $(22,008)$ |
| Subtotal Net Investment Income/(Loss) |  | 10,053 |  | 117,651 |  | 258,892 |  | 123,631 |  | 120,325 |
| Securities Lending Income |  |  |  |  |  |  |  |  |  |  |
| Securities Lending Income |  | 63 |  | 962 |  | 638 |  | 1,897 |  | 920 |
| Less: Costs of Lending Securities |  | (19) |  | (307) |  | (566) |  | (239) |  | (293) |
| Net Securities Lending Income |  | 44 |  | 655 |  | 72 |  | 1,658 |  | 627 |
| Total Net Investment Income/(Loss) |  | 10,097 |  | 118,306 |  | 258,964 |  | 125,289 |  | 120,952 |
| Charges for Services |  | 159 |  | 2,218 |  | 6,046 |  | 1,159 |  | 2,131 |
| Transfers from Other Pension Plans |  | 1 |  | - |  | 71 |  | 1,585 |  | - |
| Miscellaneous |  | - |  | 5 |  | 16 |  | - |  | 5 |
| Total Additions |  | 51,463 |  | 445,265 |  | 649,706 |  | 437,846 |  | 123,925 |
| Deductions |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 630 |  | 912,055 |  | 218,011 |  | - |  | 360,484 |
| Contribution Refunds |  | 2,647 |  | 1,182 |  | 2,971 |  | 289,785 |  | 538 |
| Annuity Payments |  | - |  | 12,322 |  | - |  | 10,034 |  | - |
| Transfers to Other Pension Plans |  | 62 |  | - |  | 679 |  | 938 |  | - |
| Transfers to Other Funds |  | 28 |  | 386 |  | 1,255 |  | - |  | 371 |
| Administrative Expenses |  | 150 |  | 2,015 |  | 5,321 |  | 1,158 |  | 1,938 |
| Total Deductions |  | 3,517 |  | 927,960 |  | 228,237 |  | 301,915 |  | 363,331 |
| Net Increase (Decrease) |  | 47,946 |  | $(482,695)$ |  | 421,469 |  | 135,931 |  | $(239,406)$ |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year: July 1 |  | 352,795 |  | 6,071,966 |  | 10,378,791 |  | 7,231,178 |  | 5,611,500 |
| End of Year: June 30 | \$ | 400,741 | \$ | 5,589,271 | \$ | 10,800,260 | \$ | 7,367,109 | \$ | 5,372,094 |

The accompanying notes are an integral part of this statement.

## Statement of Changes in Fiduciary Net Position (cont.)

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 — Page 3 of 4

| Dollars in Thousands | Pension Trust |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEOFF <br> Plan 2 |  | WSPRS <br> Plan 1/2 |  | JRS |  |  | JRF |
| Additions |  |  |  |  |  |  |  |  |
| Retirement Contributions |  |  |  |  |  |  |  |  |
| Employer | \$ | 92,049 | \$ | 7,044 | \$ | - | \$ | - |
| Plan Member |  | 151,659 |  | 5,895 |  | - |  | - |
| State |  | 60,375 |  | - |  | 9,500 |  | 501 |
| Plan Member Restorations |  | 22,212 |  | 3,000 |  | - |  | - |
| Total Retirement Contributions |  | 326,295 |  | 15,939 |  | 9,500 |  | 501 |
| Participant Contributions |  | - |  | - |  | - |  | - |
| Investment Income |  |  |  |  |  |  |  |  |
| Net Appreciation (Depreciation) in Fair Value of Investments |  | 57,610 |  | 4,864 |  | 30 |  | 3 |
| Interest and Other Investment Income |  | 161,133 |  | 17,735 |  | 48 |  | 4 |
| Dividends |  | 64,384 |  | 7,058 |  | - |  | - |
| Less: Investment Expenses |  | $(40,223)$ |  | $(4,429)$ |  | - |  | - |
| Subtotal Net Investment Income/(Loss) |  | 242,904 |  | 25,228 |  | 78 |  | 7 |
| Securities Lending Income |  |  |  |  |  |  |  |  |
| Securities Lending Income |  | 1,685 |  | 185 |  | - |  | - |
| Less: Costs of Lending Securities |  | (535) |  | (59) |  | - |  | - |
| Net Securities Lending Income |  | 1,150 |  | 126 |  | - |  | - |
| Total Net Investment Income/(Loss) |  | 244,054 |  | 25,354 |  | 78 |  | 7 |
| Charges for Services |  | 4,052 |  | 436 |  | 3 |  | - |
| Transfers from Other Pension Plans |  | 23 |  | 429 |  | - |  | - |
| Miscellaneous |  | 9 |  | 1 |  | - |  | - |
| Total Additions |  | 574,433 |  | 42,159 |  | 9,581 |  | 508 |
| Deductions |  |  |  |  |  |  |  |  |
| Benefits |  | 184,067 |  | 53,651 |  | 9,131 |  | 440 |
| Contribution Refunds |  | 6,645 |  | 508 |  | - |  | - |
| Annuity Payments |  | - |  | - |  | - |  | - |
| Transfers to Other Pension Plans |  | - |  | - |  | - |  | - |
| Transfers to Other Funds |  | 705 |  | 76 |  | - |  | - |
| Administrative Expenses |  | 5,305 |  | 448 |  | 2 |  | 1 |
| Total Deductions |  | 196,722 |  | 54,683 |  | 9,133 |  | 441 |
| Net Increase (Decrease) |  | 377,711 |  | $(12,524)$ |  | 448 |  | 67 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Beginning of Year: July 1 |  | 9,833,649 |  | 1,110,799 |  | 6,336 |  | 516 |
| End of Year: June 30 | \$ | 10,211,360 | \$ | 1,098,275 | \$ | 6,784 | \$ | 583 |

The accompanying notes are an integral part of this statement.

## Statement of Changes in Fiduciary Net Position (cont.)

## Pension Trust Funds by Plan

June 30, 2016, with Comparative Totals for June 30, 2015 — Page 4 of 4

| Dollars in Thousands | Pension Trust |  |  |  | Totals |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | JRA Defined Contribution |  | Deferred Compensation Program |  | June 30, 2016 |  | June 30, 2015 |  |
| Additions |  |  |  |  |  |  |  |  |
| Retirement Contributions |  |  |  |  |  |  |  |  |
| Employer | \$ | 21 | \$ | - | \$ | 2,025,918 |  | 1,611,122 |
| Plan Member |  | 21 |  | - |  | 1,277,682 |  | 1,090,841 |
| State |  | - |  | - |  | 70,376 |  | 68,939 |
| Plan Member Restorations |  | - |  | - |  | 64,878 |  | 55,615 |
| Total Retirement Contributions |  | 42 |  | - |  | 3,438,854 |  | 2,826,517 |
| Participant Contributions |  | - |  | 213,531 |  | 213,531 |  | 208,424 |
| Investment Income |  |  |  |  |  |  |  |  |
| Net Appreciation (Depreciation) in Fair Value of Investments |  | (45) |  | 1,967 |  | 431,497 |  | 2,216,836 |
| Interest and Other Investment Income |  | 37 |  | 8,048 |  | 1,332,678 |  | 1,289,777 |
| Dividends |  | 18 |  | 7,174 |  | 532,380 |  | 526,304 |
| Less: Investment Expenses |  | (15) |  | $(5,181)$ |  | $(338,712)$ |  | $(312,736)$ |
| Subtotal Net Investment Income/(Loss) |  | (5) |  | 12,008 |  | 1,957,843 |  | 3,720,181 |
| Securities Lending Income |  |  |  |  |  |  |  |  |
| Securities Lending Income |  | - |  | - |  | 13,775 |  | 10,954 |
| Less: Costs of Lending Securities |  | - |  | - |  | $(4,377)$ |  | $(3,720)$ |
| Net Securities Lending Income |  | - |  | - |  | 9,398 |  | 7,234 |
| Total Net Investment Income/(Loss) |  | (5) |  | 12,008 |  | 1,967,241 |  | 3,727,415 |
| Charges for Services |  | - |  | 2,317 |  | 36,777 |  | 34,415 |
| Transfers from Other Pension Plans |  | - |  | - |  | 5,880 |  | 4,754 |
| Miscellaneous |  | - |  | 3 |  | 80 |  | 67 |
| Total Additions |  | 37 |  | 227,859 |  | 5,662,363 |  | 6,801,592 |
| Deductions |  |  |  |  |  |  |  |  |
| Benefits |  | 1,231 |  | - |  | 3,827,502 |  | 3,628,379 |
| Contribution Refunds |  | - |  | 215,450 |  | 740,358 |  | 731,693 |
| Annuity Payments |  | - |  | - |  | 29,078 |  | 23,365 |
| Transfers to Other Pension Plans |  | - |  | - |  | 5,880 |  | 4,754 |
| Transfers to Other Funds |  | - |  | - |  | 6,000 |  | - |
| Administrative Expenses |  | 1 |  | 1,941 |  | 35,609 |  | 31,754 |
| Total Deductions |  | 1,232 |  | 217,391 |  | 4,644,427 |  | 4,419,945 |
| Net Increase (Decrease) |  | $(1,195)$ |  | 10,468 |  | 1,017,936 |  | 2,381,647 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Beginning of Year: July 1 |  | 12,245 |  | 3,613,923 |  | 89,474,453 |  | 87,092,806 |
| End of Year: June 30 | \$ | 11,050 | \$ | 3,624,391 | \$ | 90,492,389 | \$ | 89,474,453 |

The accompanying notes are an integral part of this statement.

## Notes to the Financial Statements

## Note 1: Summary of Significant Accounting Policies and Plan Asset Matters

## A. Reporting Entity

The state of Washington, through DRS, administers eight retirement systems for public employees of the state and political subdivisions:

- Public Employees' Retirement System (PERS)
- School Employees' Retirement System (SERS)
- Public Safety Employees' Retirement System (PSERS)
- Teachers' Retirement System (TRS)
- Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF)
- Washington State Patrol Retirement System (WSPRS)
- Judicial Retirement System (JRS)
- Judges' Retirement Fund (JRF)

DRS also administers the state's Deferred Compensation Program (DCP).

Since DRS is part of the primary government of the state of Washington, it is considered part of the state's financial reporting entity and is included in the state's Comprehensive Annual Financial Report (CAFR).

The state of Washington's CAFR can be obtained from the Office of Financial Management's website at www.ofm.wa.gov/cafr.

## B. Basic Financial Statements

The financial statements provided in this report are fiduciary statements. Fiduciary funds report assets held for others in a trustee or agency capacity and, therefore, cannot be used to support the government's own programs. DRS' fiduciary funds are the retirement pension trust funds.

DRS' financial statements have been prepared in conformity with generally accepted accounting principles (GAAP). The statements include a "Statement of Fiduciary Net Position" (SFNP) and a "Statement of Changes in Fiduciary Net Position" (SCFNP).

The SFNP includes information about the assets, liabilities and net fiduciary position for each plan. The SCFNP includes information about the additions
to, deductions from and net increase (or decrease) in fiduciary net position for each plan for the year. The statements provide a separate column for each retirement plan DRS administers.

## C. Measurement Focus and Basis of Accounting The retirement plans are accounted for in pension trust funds using the flow-of-economic-resources measurement focus and the accrual basis of accounting.

The members of the retirement systems, their employers and the state provide funding for the systems based on actuarial valuations. The Legislature establishes benefit levels and approves the actuarial assumptions used in determining contribution levels.

Plan member contributions are recognized as revenues in the period in which the contributions are earned. Employer contributions to each plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

DCP is accounted for in a pension trust fund using the flow-of-economic-resources measurement focus and the accrual basis of accounting. Participant contributions are recognized as revenues in the period in which the contributions are due. Refunds are recognized when due and payable in accordance with the terms of the plan.

DRS maintains an administrative fund to account for the revenues and operating expenditures incurred in administering DCP. Since these costs are incurred in the administration of the program, they have been reported within the program.

## Notes to the Financial Statements (cont.)

D. Method Used to Value Investments

The pension trust funds report investments at fair value and categorize fair value measurements within the hierarchy established by generally accepted accounting principles.

The table below presents fair value measurements as of June 30, 2016, for the retirement funds that the WSIB manages within the Commingled Trust Fund (CTF).

| Investments Measured at Fair Value As of June 30, 2016 - Dollars in Thousands |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type |  | Fair Value |  | Level 1 Inputs |  | evel 2 Inputs |  |  |
| Debt Securities |  |  |  |  |  |  |  |  |
| Mortgage- and Other Asset-Backed Securities | \$ | 1,075,525 | \$ | - | \$ | 1,075,525 | \$ | - |
| Corporate Bonds |  | 9,059,916 |  | - |  | 9,059,916 |  | - |
| U.S. and Foreign Government and Agency Securities |  | 7,609,073 |  | - |  | 7,609,073 |  | - |
| Total Debt Securities |  | 17,744,514 |  | - |  | 17,744,514 |  | - |
| Equity Securities |  |  |  |  |  |  |  |  |
| Common and Preferred Stock |  | 17,657,739 |  | 17,624,497 |  | 33,242 |  | - |
| Depository Receipts and Other Miscellaneous |  | 805,770 |  | 803,626 |  | 2,144 |  | - |
| Mutual Funds and Exchange-Traded Funds |  | 1,813 |  | 1,813 |  | - |  | - |
| Real Estate Investment Trusts |  | 321,054 |  | 321,054 |  | - |  | - |
| Private Equity and Tangible Asset Funds |  | 158,092 |  | 158,092 |  | - |  | - |
| Total Equity Securities |  | 18,944,468 |  | 18,909,082 |  | 35,386 |  | - |
| Total Return Swap Contracts (Investment Derivative) |  | 22 |  | - |  | 22 |  | - |
| Total Investments by Fair Value Level |  | 36,689,004 |  | 18,909,082 |  | 17,779,922 |  | - |
| Investments Measured at Net Asset Value |  |  |  |  |  |  |  |  |
| Private Equity |  | 17,297,657 |  | - |  | - |  | - |
| Real Estate |  | 13,210,236 |  | - |  | - |  | - |
| Tangible Assets |  | 2,462,636 |  | - |  | - |  | - |
| Collective Investment Trust Funds (Equity Securities) |  | 10,463,890 |  | - |  | - |  | - |
| Total Investments at Net Asset Value |  | 43,434,419 |  | - |  | - |  | - |
| Total Investments Measured at Fair Value | \$ | 80,123,423 | \$ | - | \$ | - | \$ | - |
| Other Assets at Fair Value |  |  |  |  |  |  |  |  |
| Collateral Held Under Securities Lending Agreements ${ }^{1}$ |  | 683,169 |  | - |  | 683,169 |  | - |
| Net Foreign Exchange Contracts Receivable - Forward and Spot |  | 10,303 |  | - |  | 10,303 |  | - |
| Margin Variation Receivable - Futures Contracts |  | 17,474 |  | - |  | 17,474 |  | - |
| Total Other Assets Measured at Fair Value | \$ | 710,946 | \$ | - | \$ | 710,946 | \$ | - |

${ }^{1}$ This entry includes $\$ 2.5$ million of collateral the OST holds under securities lending agreements. Collateral the OST holds under securities lending agreement is classified in Level 2 of the fair value hierarchy and is valued using observable inputs, including quoted prices for similar securities and interest rates.

## Notes to the Financial Statements (cont.)

Cash and Cash Equivalents: Cash and cash equivalents include highly liquid investments, which include foreign currencies and short-term investment funds. The shortterm investment funds are valued at cost. Accordingly, these investments are excluded from the fair value schedule. Cash and cash equivalents of $\$ 1.9$ billion are reported as liquidity in the SFNP.

Investments Classified as Level 1: Investments classified as Level 1 in the table on the previous page are exchange-traded equity securities whose values are based on published market prices and quotations from national security exchanges as of the New York Stock Exchange's close at the end of each reporting period.

Investments Classified as Level 2: Investments classified as Level 2 in the table on the previous page are primarily composed of publicly traded debt securities and exchange-traded stocks traded in inactive markets. Publicly traded debt securities are sourced from reputable pricing vendors using models that are marketbased measurements representing their good faith opinion on the exit value of a security in an orderly transaction under current market conditions. Such models take into account quoted prices, nominal yield spreads, benchmark yield curves, prepayment speeds and other market-corroborated inputs.

Investments Measured at Net Asset Value (NAV): The fair value of investments that are organized as limited partnerships and have no readily ascertainable fair value is determined by using the net asset value per share (or its equivalent) of the pension trust fund's ownership interest in partners' capital. These values are based on the capital account balance the general partner reports at the closest available reporting period, adjusted by subsequent contributions, distributions, management fees, and changes in values of foreign currency and published market prices for certain securities.

Even though the limited partnerships' annual financial statements are audited by independent auditors, due to the inherent uncertainties in estimating fair values, it is possible that the estimates will change in the near-term or the subsequent sale of assets will be different from the reported net asset value.

30 DRS $\nabla$ Financial Section - Comprehensive Annual Financial Report

With the exception of two publicly traded funds, these investments can never be redeemed. Instead, the nature of these investments provides for distributions through the liquidation of the underlying assets or net operating cash flows. It is anticipated that the various investments within each asset class will be liquidated over the following periods:

| Alternative Assets Expected Liquidation Periods |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Liquidation Periods | Private Equity | Real Estate | Tangible Assets | Total | \% of <br> Total |
| Publicly Traded, Level 1 | 99,640 | - | 58,452 | 158,092 | 0.5\% |
| Fewer Than 3 years | 124,200 | 168,081 | 40 | 292,321 | 0.9\% |
| 3 to 9 years | 8,151,758 | 2,033,012 | 763,507 | 10,948,277 | 33.0\% |
| 10 or more years | 9,021,699 | 11,009,143 | 1,699,090 | 21,729,932 | 65.6\% |
| Total | 17,397,297 | 13,210,236 | 2,521,089 | 33,128,622 | 100.0\% |

Private Equity: This includes 262 private equity limited liability partnerships that invest primarily in the United States, Europe and Asia in leveraged buyouts, venture capital, distressed debt and growth equity. The fair value of individual capital account balances is based on the valuation reported by private equity partnerships using the following methodologies to value the underlying porffolio companies:

- Valuations of publicly traded porffolio companies are based on active exchanges using quoted market prices as of the close of trading each month-end.
- When a portfolio company investment does not have a readily available market price but has a return that is determined by reference to an asset for which a market price is readily available, valuations are based on the closing market price of the reference asset on the valuation date, adjusted for unique factors that affect the fair value of the investment held.
- When porffolio company investments are private holdings and are not traded on active security exchanges, methodologies consist primarily of income and market approaches. The income approach involves a discounted cashflow analysis based on portfolio companies' projections. The market approach involves


## Notes to the Financial Statements (cont.)

valuing a company at a multiple of a specified financial measure, generally earnings before interest, taxes, depreciation and amortization, based on multiples of comparable publicly traded companies.

Real Estate: This includes 31 real estate investments. Targeted investment structures within the real estate porifolio include real estate operating companies, limited liability companies, joint ventures, commingled funds and co-investments. Real estate partnerships provide quarterly valuations to the pension trust fund management. Individual properties are valued by the investment management at least annually and are adjusted as frequently as quarterly if material market or operational changes have occurred. Properties are generally externally appraised every one to five years, depending on the investment. Structured finance investments receive quarterly adjustments by the partners, generally applying the assumption that all such positions will be held to maturity. Annual audits of partnerships include a review of compliance with each partnership's valuation policies.

Tangible Assets: This includes 29 limited liability structures and funds. The primary goals of the tangible asset porffolio are to generate a long-term sustainable and stable income stream as well as generate appreciation at least commensurate with inflation. Valuation practices of general partners and asset managers are consistent with private equity limited partnerships.

Collective Investment Trust Funds: The pension trust fund invests in three separate collective investment trust funds. Each fund determines a fair value by obtaining fair values of the underlying holdings using reputable pricing sources and computing an overall net asset value per share. The holdings within each fund are publicly traded equity securities.

Two funds are passively managed to approximate the capitalization weighted total rates of return of the MSCl U.S. Investable Market Index and the MSCI Emerging Markets Investable Market Index. Each fund has daily openings and contributions, and withdrawals can be made on any business day. The fund managers, at their
discretion, may require withdrawal proceeds be made partially or wholly in kind. In certain circumstances, the fund managers might choose to suspend valuation and/or the right to make contributions and withdrawals from the fund. Such circumstances include actual or anticipated closure, restriction, or suspension of trading activity in any markets or exchanges in which the fund investments are traded; when the purchase, sale or pricing of the fund's investments would not be reasonably practicable or advisable; or when suspending contributions or withdrawals would be in the best interest of the fund or participants.

The third fund seeks to achieve long-term capital appreciation through active investment management in emerging market countries. The index against which the fund compares its performance is the MSCl Emerging Market Index. The pension trust fund may redeem some or all of its holdings on each monthly valuation date. The fund managers may delay redemption proceeds if they determine that doing so is reasonably necessary to prevent a material adverse impact on the fund or other investors. The fund managers, at their discretion, may require withdrawal proceeds be made partially or wholly in kind.

## Other Assets and Liabilities Measured at Fair

Value: Forward exchange contracts are valued by interpolating a value using the spot foreign exchange rate and forward points (based on the spot rate and currency interest rate differentials), which are all inputs that are observable in active markets (Level 2).

Cash collateral held and the offsetting obligations under securities lending agreements are valued by the pension trust fund lending agency. They are sourced from reputable pricing vendors using models that are market-based measurements representing their good faith opinion on the exit value of a security in an orderly transaction under current market conditions. Such models take into account quoted prices, nominal yield spreads, benchmark yield curves, prepayment speeds and other market-corroborated inputs.

Gains and losses on futures contracts are settled daily, based on a notional (underlying) principal value, and do not involve an actual transfer of the specific

## Notes to the Financial Statements (cont.)

instrument. The margin variation represents the current gain or loss remaining to be settled from the prior day. The custodial bank provides quoted prices for these securities from a reputable pricing vendor.

## DCP, JRA and Plan 3 Self-Directed Investments Valuation:

DCP, JRA and Plan 3 Self-Directed Investments

|  | Fair Value |
| :--- | ---: |
| Investments Measured at Net Asset Value |  |
| Target Date Funds (Retirement Strategy Funds) | $\mathbf{3 , 5 9 3 , 0 5 4}$ |
| Equity Index Funds | $1,949,231$ |
| Bond Funds | 673,910 |
| Short-Term Investment Funds | 501,793 |
| Balanced Fund | 252,675 |
| Subtotal | $6,970,663$ |
| Investments Measured at Contract Value |  |
| Guaranteed Investment Contracts | $\mathbf{8 7 1 , 7 0 4}$ |
| Total | $\mathbf{\$ 7 , 8 4 2 , 3 6 7}$ |

DCP, JRA and Plan 3 defined contribution Self plan assets have no unfunded commitments and can be redeemed daily with no notice period. Investments measured at fair value are daily valued funds. Funds are managed by the WSIB (Bond Fund), Alliance Bernstein (Target Date Funds), Walden Asset Management (Balanced Fund) and BlackRock (Equity Index Funds and Short-Term Investment Funds). All DCP and Plan 3 Self-Directed funds that are measured at fair value are measured at the NAV. The Guaranteed Investment Contracts the WSIB manages for DCP are reported at contract value.

Trading restrictions have been established to safeguard participants against the effects of excessive trading. If a participant in DCP or Plan 3 transfers more than $\$ 1,000$ out of a fund, he or she will be required to wait 30 calendar days before transferring money back into that fund. The 30-day window is based on the last time the participant made a transfer out of the fund.

Bond Fund: The WSIB manages the Washington State Bond Fund. Investments in this fund are not available to the general public. The fund employs an active strategy that seeks to add incremental value over the index and normally invests in a diversified portfolio of investment-
grade corporate securities. The porffolio intends to earn additional returns through security selection, but is allowed to deviate from the index's duration by plus or minus $15 \%$. The Bond Fund staff determines a net asset value per share by obtaining fair values of the underlying holdings, using reputable pricing sources on a daily basis. The holdings within this fund are publicly traded debt securities and are actively managed to meet or exceed the return of the Barclays Capital Intermediate Credit Index. The fund may redeem some or all holdings daily without restriction.

Balanced Fund: Walden Asset Management actively manages the Walden Socially Responsible Investment Balanced Fund. The fund is a well-diversified porffolio of stocks, bonds and money market instruments. At least $30 \%$ of the fund's assets are invested in fixed income securities and, at most, $70 \%$ of the fund's assets are invested in foreign and domestic equity securities. The fund's asset allocation will vary based on Walden's assessment of global economic conditions, current valuations within capital markets, balancing risk and reward, and the relative attractiveness of stocks versus bonds. Equity investments will focus on an opportunity set of domestic and international companies Walden judges to be of higher quality than peers. The valuation methodologies the fund uses maximize the use of observable inputs and minimize the use of unobservable inputs in determining fair value. No restrictions on redemptions exist.

Equity Index Funds: BlackRock Institutional Trust Co. manages the Equity Index funds, which include the U.S. Large Cap, Global, U.S. Small Cap Value and Emerging Market Equity Index Funds. BlackRock uses a passive, or indexing, approach to achieve each fund's investment objectives. It does not seek to outperform the index; rather, it seeks to track the index and does not seek temporary defensive positions when markets decline or appear overvalued.

The funds' investments are valued at fair value each day the fund is open for contributions and redemptions and, for financial reporting purposes, as of the report date, if the reporting period ends on a day the fund is not open. The BlackRock Global Valuation Methodologies Committee (GVMC) provides oversight of the valuation

## Notes to the Financial Statements (cont.)

of investments for the fund. The investments of the funds are valued pursuant to the policies and procedures the GVMC developed and BlackRock's global valuation policy approved. Various inputs are used in determining the fair value of financial instruments and could be based on independent market data or be internally developed.

The U.S. Large Cap Equity Index Fund invests exclusively in the Equity Index Fund, which is an index fund that seeks investment results that correspond generally to the price and yield performance of a particular index. The fund is invested in a porffolio of equity securities. Its objective is to approximate the capitalization weighted total rate of return of the segment of the U.S. market for publicly traded equity securities the larger capitalized companies represent. The criterion for selection of investments is the S\&P 500 Index.

The Global Equity Index Fund seeks investment results that correspond generally to the price and yield performance of a particular index. The fund is invested and reinvested primarily in equity securities. Its objective is to approximate the capitalization weighted total rate of return of the entire global market for publicly traded equity securities as captured by the MSCI ACWI IMI USA Net Dividend Index. In seeking its objective, the fund invests in the Russell 3000 Index Fund E and the BlackRock MSCI ACWI ex-U.S. IMI Index Fund E in target weights, subject to periodic rebalancing. Each fund is an index fund that seeks investment results that correspond generally to the price and yield performance of a particular index.

The U.S. Small Cap Equity Index Fund invests exclusively in Russell 2000 Value Fund F, which is an index fund that seeks investment results that correspond generally to the price and yield performance of a particular index. The fund is invested and reinvested in a portfolio of equity securities. Its objective is to approximate the capitalization weighted total rate of return of the segment of the U.S. market for publicly traded equity securities as the Russell 3000 Index represents, excluding the equity securities of the 1,000 largest capitalized companies. Of those 2,000 companies, the Russell 2000 Value Index represents
those with a less-than-median orientation toward growth. Companies in this index generally have low price-to-book and price-to-earnings ratios, higher dividend yields, and lower forecasted growth values than more growth-oriented securities.

The Emerging Market Equity Index Fund is invested and reinvested in a portfolio of international equity securities, depositary receipts, registered investment companies and derivatives. Its objective is to provide returns that approximate the capitalization weighted total rates of return of the markets in certain countries for equity securities traded outside the United States.

Target Date Funds: Target Date Funds (Retirement Strategy Funds) are diversified asset allocation portfolios. The asset mix of each fund is adjusted over time to the allocation deemed appropriate for the target retirement date. Each fund has a diversified portfolio of equities and bonds that become progressively more conservative over time as the fund approaches and passes through its target date for retirement.

The assets of these funds are aggregated and fair value is measured at the NAV. Alliance Bernstein is the fund manager of the Target Date Funds. The funds also include underlying funds that the WSIB and BlackRock manage, whose valuation methods are described within the Bond Fund (WSIB) and Equity Index Funds (BlackRock).

The fair value of debt instruments, such as bonds, and over-the-counter derivatives is generally based on market price quotations, recently executed market transactions, when observable, or industry-recognized modeling techniques.

When readily available market prices or relevant bid prices are not available for certain equity investments, such investments could be valued based on similar publicly traded investments, movements in relevant indices since last available prices, or underlying company fundamentals and comparable company data, such as multiples to earnings or other multiples to equity.

## Notes to the Financial Statements (cont.)

Options are valued using market-based inputs to models, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency, when such inputs and models are available. Alternatively, the values might be obtained through unobservable management-determined inputs and/or management's proprietary models. When models are used, the selection of a particular model to value an option depends on the contractual terms of, and specific risks inherent in, the option as well as the availability of pricing information in the market. Valuation models require a variety of inputs, including contractual terms, market prices, measures of volatility and correlations of such inputs.

Bank loan prices are provided by third-party pricing services and consist of a composite of the quotes the vendor receives, which creates a consensus price.

Pricing vendors' valuations of mortgage-backed or other asset-backed securities are based on both proprietary and industry recognized models and discounted cashflow techniques. Significant inputs to the valuation of these instruments are value of the collateral, the rates and timing of delinquencies, the rates and timing of prepayments, and default and loss expectations, which are driven in part by housing prices for residential mortgages. Significant inputs are determined based on relative value analyses, which incorporate comparisons to instruments with similar collateral and risk profiles, including relevant indices.

Other fixed income investments, including non-U.S. government and corporate debt, are generally valued using quoted market prices, if available, which are typically impacted by current interest rates, maturity dates and any perceived credit risk of the issuer. Additionally, in the absence of quoted market prices, pricing vendors use these inputs to derive a valuation based on industry or proprietary models that incorporate issuer-specific data with relevant yield/ spread comparisons with more widely quoted bonds that have similar key characteristics.

## E. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the

United States requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Actual results could differ from the estimated amounts.

## F. Revenue Recognition

Interest and dividend income is recognized when earned. Capital gains and losses are recognized on a trade-date basis. Purchases and sales of investments are also recorded on a trade-date basis. Unrealized gains and losses are included in the SCFNP.

## G. Allocations

DRS maintains a fund to account for the administrative additions and deductions incurred in administering the pension plans. These additions and deductions have been allocated to the pension plans.

DRS maintains a general capital assets fund to account for the capital assets used in administering the pension plans. These capital assets have been allocated to the pension plans based on asset balance. DRS also maintains a general long-term obligation fund to account for accumulated compensated absences incurred in administering the pension plans. These general long-term obligations have also been allocated to the pension plans based on asset balance.
H. Deposits, Investments and Securities Lending Deposits: The Office of the State Treasure (OST) manages DRS' deposits, which consist of securities AAA-rated issuers issue or deposits in financial institutions the Federal Deposit Insurance Corporation (FDIC) partially insures or the Washington Public Deposit Protection Commission (PDPC) collateralizes up to legal limitations. The PDPC constitutes a multiple financial institution collateral pool. The PDPC's agent holds pledged securities under the pool in the name of the collateral pool.

State law (43.84.080 RCW) specifies that whenever a fund or cash balance in the state treasury is more than sufficient to meet the current expenditures, the OST may invest or reinvest such portion of the funds or balances as the OST deems expedient. Statute authorizes the OST to buy and sell the following types of instruments: U.S. government and agency securities, bankers'

## Notes to the Financial Statements (cont.)

acceptances, commercial paper and deposits with qualified public depositories.

Securities underlying repurchase and reverse repurchase agreements are limited to those same instruments. DRS receives its proportionate share of investment earnings from surplus balances in the state treasury based on its daily balance for the period. DRS' deposits are separately displayed on the SFNP as cash and pooled investments.

Deposits - Custodial Credit Risk: "Custodial credit risk" is the risk that deposits might not be returned in the event of the failure of a financial institution. Statutes minimize custodial credit risk by restricting the OST to deposit funds in financial institutions that are physically located in Washington state unless otherwise expressly permitted by statute and authorized by the PDPC. As of June 30, 2016, the carrying amount of DRS' cash and pooled investment deposits is $\$ 42.8$ million, all of which is insured or collateralized.

Investments: The WSIB has been authorized by statute as having the investment management responsibility for retirement and DCP funds. The WSIB may invest as provided by statute (Chapter 43.33A RCW) and WSIB policy in the following: U.S. Treasury Bills; discount notes; repurchase agreements; reverse repurchase agreements; bankers' acceptances; commercial paper; guaranteed investment contracts; U.S. government and agency (government-sponsored corporations eligible for collateral purposes at the Federal Reserve) securities; non-U.S. dollar bonds; investment grade corporate bonds; noninvestment grade corporate bonds; publicly traded mortgage-backed securities; privately placed mortgages; private placements of corporate debt; U.S. and foreign common stock; U.S. preferred stock; convertible securities; private equity, including but not limited to investment corporations, partnerships and limited liability companies for venture capital, leveraged buyouts, real estate and other tangible assets, or other forms of private equity; asset-backed securities; and derivative securities, including futures, options, options on futures, forward contracts and swap transactions.

There were no violations of these investment restrictions during fiscal year 2016.

Investments - Interest Rate Risk: "Interest rate risk"
is the risk that changes in interest rates over time will adversely affect the fair value of an investment. This risk is managed within the porffolios using effective duration, which is the measure of a debt investment's exposure to fair value changes arising from changes in interest rates. Increases in prevailing interest rates generally translate into decreases in the fair values of those investments.

The retirement funds' fixed income investments are to be actively managed to meet or exceed the return of the Barclays Capital Universal Index, with volatility similar to or less than the index. As of June 30, 2016, the retirement funds' duration was within the duration target of this index.

The schedule on page 36 provides information about the interest rate risks associated with the categorized investments in the Commingled Trust Fund (CTF) as of June 30, 2016. The schedule displays asset classes held by maturity in years and effective durations. Residential mortgage-backed, commercial mortgagebacked and asset-backed securities are reported using the average life within the porffolio.
"Average life" is a calculated estimate of the average time until maturity for these securities, taking into account possible prepayments of principal. All other categorized securities on this schedule are reported using the stated maturity date.

Investments - Credit Risk: "Credit risk" is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The WSIB's investment policies for the retirement funds limit the fixed income securities to investment grade or higher at the time of purchase. Investment-grade securities are those fixed income securities with a Moody's rating of Aaa to Baa or a Standard and Poor's rating of AAA to BBB. The retirement funds' rated debt investments as of June 30, 2016, were rated by Moody's and/or an equivalent national rating organization.

Credit ratings for the retirement funds' rated debt investments as of June 30, 2016, are presented in the schedule on page 36.

## Notes to the Financial Statements (cont.)

| Investment Maturities <br> As of June 30, 2016 - Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type | Total Fair Value |  | Maturity |  |  |  |  |  |  |  | Effective Duration |
|  |  |  | Less Than One Year |  | 1-5 Years |  | 6-10 Years |  | More Than 10 Years |  |  |
| Mortgage- and Other Asset-Backed Securities | \$ | 1,075,525 | \$ | 99,821 | \$ | 942,448 | \$ | 33,256 | \$ | - | 2.8 |
| Corporate Bonds |  | 9,059,916 |  | 545,196 |  | 3,695,920 |  | 3,463,220 |  | 1,355,580 | 6 |
| U.S. Government and Agency Securities |  | 6,291,884 |  | 1,009,773 |  | 2,756,616 |  | 1,730,337 |  | 795,158 | 6.2 |
| Foreign Government and Agency Securities |  | 1,317,189 |  | 119,441 |  | 436,992 |  | 474,919 |  | 285,837 | 5.6 |
| Total Retirement Funds Investment Categorized | \$ | 17,744,514 | \$ | 1,774,231 | \$ | 7,831,976 | \$ | 5,701,732 | \$ | 2,436,575 | $5.9{ }^{1}$ |
| Investments Not Required to Be Categorized |  |  |  |  |  |  |  |  |  |  |  |
| Cash and Cash Equivalents |  | 1,999,324 |  |  |  |  |  |  |  |  |  |
| Equity Securities |  | 29,250,266 |  |  |  |  |  |  |  |  |  |
| Alternative Investments |  | 33,128,621 |  |  |  |  |  |  |  |  |  |
| Return Swap Contracts |  | 22 |  |  |  |  |  |  |  |  |  |
| Total Investments Not Categorized | \$ | 64,378,233 |  |  |  |  |  |  |  |  |  |
| DCP, JRA and Defined Contribution Self Plan Assets |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Strategy Funds (Target Date Funds) |  | 3,593,054 |  |  |  |  |  |  |  |  |  |
| Equity Index Funds |  | 1,949,231 |  |  |  |  |  |  |  |  |  |
| Guaranteed Investment Contracts |  | 871,704 |  |  |  |  |  |  |  |  |  |
| Bond Funds |  | 673,910 |  |  |  |  |  |  |  |  |  |
| Short-Term Investment Funds |  | 501,793 |  |  |  |  |  |  |  |  |  |
| Balanced Fund |  | 252,675 |  |  |  |  |  |  |  |  |  |
| Total DCP, JRA and Defined Contribution Self Plan Assets | \$ | 7,842,367 |  |  |  |  |  |  |  |  |  |
| Securities Under Lending Agreements |  | 683,169 |  |  |  |  |  |  |  |  |  |
| Total Investments as of June 30, 2016 | \$ | 90,648,283 |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Excludes cash balances in calculation

## Investment Credit Ratings

As of June 30, 2016 - Dollars in Thousands

| Moody's Equivalent Rating |  | al Fair Value | Mortgage- and Other Asset-Backed Securities |  | Corporate Bonds |  | U.S. Government and Agency Securities |  | Foreign Government and Agency Securities |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aaa | \$ | 7,964,150 | \$ | 1,069,082 | \$ | 455,439 | \$ | 6,291,884 | \$ | 147,745 |
| Aa 1 |  | 76,812 |  | - |  | 17,549 |  | - |  | 59,263 |
| Aa2 |  | 190,569 |  | 389 |  | 95,469 |  | - |  | 94,711 |
| Aa3 |  | 877,712 |  | - |  | 668,309 |  | - |  | 209,403 |
| A1 |  | 737,437 |  | - |  | 737,437 |  | - |  | - |
| A2 |  | 455,817 |  | - |  | 455,817 |  | - |  | - |
| A3 |  | 1,178,755 |  | - |  | 1,106,334 |  | - |  | 72,421 |
| Baa1 |  | 1,292,003 |  | - |  | 1,187,267 |  | - |  | 104,736 |
| Baa2 |  | 1,204,009 |  | - |  | 1,050,247 |  | - |  | 153,762 |
| Baa3 |  | 2,161,786 |  | 5,135 |  | 1,982,213 |  | - |  | 174,438 |
| Ba1 or Lower |  | 1,605,464 |  | 919 |  | 1,303,835 |  | - |  | 300,710 |
| Total | \$ | 17,744,514 | \$ | 1,075,525 | \$ | 9,059,916 | \$ | 6,291,884 | \$ | 1,317,189 |

## Notes to the Financial Statements (cont.)

## Foreign Currency Exposure by Country

As of June 30, 2016 - Dollars in Thousands, Investment Type in U.S. Dollar Equivalent

| Foreign Currency Denomination | Cash and Cash Equivalents |  | Debt Securities |  |  | Equity Securities | Derivatives |  |  | Alternative Assets | Open Foreign Exchange Contracts — Net |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Australian Dollar | \$ | 5,798 | \$ | 282,611 | \$ | 462,452 | \$ | - | \$ | 6,665 | \$ | 1,866 | \$ | 759,392 |
| Brazilian Real |  | 241 |  | 142,924 |  | 129,527 |  | (176) |  | - |  | 3,987 |  | 276,503 |
| Canadian Dollar |  | 9,791 |  | - |  | 656,922 |  | - |  | - |  | (300) |  | 666,413 |
| Chilean Peso |  | 195 |  | 60,847 |  | 14,364 |  | - |  | - |  | (14) |  | 75,392 |
| Colombian Peso |  | - |  | 77,670 |  | - |  | - |  | - |  | 1,127 |  | 78,797 |
| Danish Krone |  | 536 |  | - |  | 177,424 |  | - |  | - |  | $(2,249)$ |  | 175,711 |
| Euro |  | 20,795 |  | - |  | 2,531,600 |  | - |  | 2,332,868 |  | 3,101 |  | 4,888,364 |
| Hong Kong Dollar |  | 2,974 |  | - |  | 584,272 |  | 528 |  | - |  | 14 |  | 587,788 |
| Indian Rupee |  | 360 |  | 103,926 |  | 230,786 |  | - |  | - |  | 16 |  | 335,088 |
| Indonesian Rupiah |  | 126 |  | 29,686 |  | 67,647 |  | - |  | - |  | (50) |  | 97,409 |
| Japanese Yen |  | 25,175 |  | - |  | 1,922,926 |  | - |  | - |  | 1,465 |  | 1,949,566 |
| Malaysian Ringgit |  | 746 |  | 52,644 |  | 60,409 |  | - |  | - |  | 320 |  | 114,119 |
| Mexican Peso |  | 1,060 |  | 84,993 |  | 86,525 |  | - |  | - |  | (197) |  | 172,381 |
| Philippine Peso |  | 36 |  | 29,838 |  | 27,660 |  | - |  | - |  | 29 |  | 57,563 |
| Pound Sterling |  | 9,958 |  | - |  | 2,017,233 |  | - |  | - |  | $(2,818)$ |  | 2,024,373 |
| Singapore Dollar |  | 1,129 |  | - |  | 169,391 |  | - |  | - |  | 106 |  | 170,626 |
| South African Rand |  | 1,552 |  | - |  | 128,324 |  | - |  | - |  | 1,186 |  | 131,062 |
| South Korean Won |  | 4,460 |  | - |  | 307,308 |  | (293) |  | - |  | $(1,032)$ |  | 310,443 |
| Swedish Krona |  | 2,032 |  | - |  | 282,958 |  | - |  | - |  | 629 |  | 285,619 |
| Swiss Franc |  | 371 |  | - |  | 993,081 |  | - |  | - |  | (117) |  | 993,335 |
| Taiwan Dollar |  | 3,134 |  | - |  | 208,055 |  | (31) |  | - |  | (509) |  | 210,649 |
| Thai Baht |  | 1,110 |  | 43,303 |  | 68,132 |  | - |  | - |  | (50) |  | 112,495 |
| Turkish Lira |  | 1,029 |  | 48,745 |  | 74,731 |  | 3 |  | - |  | 1,249 |  | 125,757 |
| Other |  | 1,757 |  | 92,281 |  | 152,801 |  | - |  | - |  | 2,544 |  | 249,383 |
| Total Foreign Currency Exposure | \$ | 94,365 | \$ | 1,049,468 | \$ | 11,354,528 | \$ | 31 | \$ | 2,339,533 | \$ | 10,303 | \$ | 14,848,228 |

Source: Washington State Investment Board

## Investments - Concentration of Credit Risk:

"Concentration of credit risk" is the risk of loss attributed to the magnitude of an investment in a single issuer.

The retirement funds' policy states that no corporate fixed income issue shall exceed $3 \%$ of cost at the time of purchase or $6 \%$ of fair value of the fund thereafter and that no high-yield issues shall exceed $1 \%$ of cost or $2 \%$ of the fair value of the fund.

No concentration of credit risk exceeded these policy guidelines as of June 30, 2016. Additionally, no single investment (other than any issued or explicitly guaranteed by the U.S. government or involving mutual
funds or investment pools) comprised more than $5 \%$ of DRS' net investments at the end of fiscal year 2016.

Investments - Custodial Credit Risk: "Custodial credit risk" is the risk that, in the event that a depository institution or counterparty fails, the WSIB would not be able to recover the value of its deposits, investments or collateral securities.

As of June 30, 2016, investment securities (excluding cash, cash equivalents and repurchase agreements held as securities lending collateral) were registered and held in the name of the WSIB for the benefit of the retirement funds and were not exposed to custodial credit risk. The WSIB has no general policies relating to

## Notes to the Financial Statements (cont.)

custodial credit risk.

Investments - Foreign Currency Risk: "Foreign currency risk" is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The WSIB does not have a formal policy to limit the retirement funds' foreign currency risk.

The WSIB manages exposure to fair value loss by requiring its international securities investment managers to maintain diversified portfolios by sector and by issuer to limit foreign currency and security risk.

The retirement funds' exposure to foreign currency risk as of June 30, 2016, is presented in the schedule on page 37. The schedule, stated in U.S. dollars, provides information on deposits and investments held in various foreign currencies. Private equity and real estate are presented according to the financial reporting currency of the individual funds and is not a presentation of currency exposure relating to the underlying holdings.

## Securities Lending and Repurchase Agreements:

Management responsibilities for securities lending and repurchase agreements are described in the following paragraphs.

WSIB: Washington state law and WSIB policy permit the WSIB to participate in securities lending transactions to augment the investment income of the retirement funds. The WSIB has entered into an agreement with State Street Corporation (SSC) to act as agent for the WSIB in securities lending transactions. Because SSC is the custodian bank for the WSIB, it is a counterparty to these transactions.

The fair value of the securities on loan as of June 30, 2016 , was about $\$ 1.5$ billion. The securities on loan remain in the SFNP in their respective categories. Cash collateral received totaling $\$ 683.1$ million is reported as a securities lending obligation, and the fair value of the reinvested cash collateral totaling $\$ 683.1$ million is reported as securities lending collateral in the SFNP. Collateral held under securities lending agreements and obligations under securities lending agreements reported in the SFNP include $\$ 2.5$ million the OST managed. OST securities lending
is documented on page 39 .
Securities received as collateral that the WSIB does not have the ability to pledge or sell unless the borrower defaults are not reported as assets and liabilities. Securities received as collateral as of June 30, 2016, totaled $\$ 900.0$ million.

The WSIB's agent loaned and collateralized debt and equity securities with cash and U.S. government or U.S. agency securities, including U.S. agency mortgage-backed securities (excluding letters of credit). When the loaned securities had collateral denominated in the same currency, the collateral requirement was $102 \%$ of the fair value, including accrued interest of the securities loaned. All other securities were required to be collateralized at $105 \%$ of the fair value, including accrued interest on the loaned securities.

The following table summarizes the securities held from reinvestment of cash collateral and securities received as collateral as of June 30, 2016:

| Cash and Securities Held as Collateral |  |  |
| :--- | ---: | ---: |
| As of June 30, 2016 — Dollars in Millions |  |  |
| Mortgage-Backed Securities | $\$$ | 461.8 |
| Repurchase Agreements | 270.4 |  |
| Yankee CD | 151.3 |  |
| Commercial Paper | 115.0 |  |
| U.S. Treasuries |  | 437.2 |
| Cash Equivalents and Other | $\mathbf{\$}$ | $\mathbf{1 , 5 7 3 . 0}$ |
| Total Collateral Held | $\underline{\mathbf{1 , 5 1}}$ |  |

During fiscal year 2016, securities lending transactions could be terminated on demand by either the WSIB or the borrower.

As of June 30, 2016, the collateral held had an average duration of 17.2 days and an average weighted final maturity of 73.4 days. Because the securities lending agreements were terminable at will, their duration did not generally match the duration of the investments made with the cash collateral. Noncash collateral could not be pledged or sold, absent borrower default. A specific borrower could hold no more than $20 \%$ of the total-on-loan value. Collateral

## Notes to the Financial Statements (cont.)

investment guidelines specifically prohibit European domiciled holdings. No restrictions exist on the amount of securities that can be lent.

Securities were lent with the agreement that they would be returned in the future for exchange of the collateral. SSC indemnified the WSIB by agreeing to purchase replacement securities or return the cash collateral in the event a borrower failed to return the loaned securities or pay distributions thereon. SSC's responsibilities included performing appropriate borrower and collateral investment credit analyses, demanding adequate types and levels of collateral, and complying with applicable federal regulations concerning securities lending.

During fiscal year 2016, there were no significant violations of legal or contractual provisions or failures by any borrowers to return loaned securities or to pay distributions thereon. Further, the retirement funds incurred no losses during the fiscal year resulting from a default by either borrowers or securities lending agents.

Credit Risk: The WSIB mitigates credit risk in securities lending with a policy that strictly limits the types of collateral that may be used to secure these transactions.

OST: State statues permit the OST to lend its securities to broker-dealers and other entities with a simultaneous agreement to return the collateral for the same securities in the future. The OST, which has contracted with Citibank as lending agent, receives earnings for this activity.

The OST lending agent lends U.S. government and U.S. agency securities and receives collateral, which can be in the form of cash or other securities. The collateral, which must be valued at $102 \%$ of the fair market value of the loaned securities, is priced daily and, if necessary, action is taken to maintain the collateralization level at 102\%.

The lending agent invests the cash in accordance with investment guidelines the OST approved. The custodian holds the securities held as collateral and the securities underlying the cash collateral. One option available to the lending agent is to invest cash collateral into an OST
account in the Local Government Investment Pool (LGIP).

The contract with the lending agent requires indemnification of the OST if a borrower fails to return the securities (or the securities' collateral is inadequate to replace the securities lent) or a borrower fails to pay the OST for income distribution by the securities' issuers while the securities are on loan. The OST cannot pledge or sell collateral securities received unless the borrower defaults. As of June 30, 2016, securities lent totaled $\$ 2.4$ million. Collateral held under securities lending agreements and obligations under securities lending agreements each totaled $\$ 2.5$ million, which was invested in the LGIP.

State law also permits the OST to enter into reverse repurchase agreements (that is, a sale of securities with a simultaneous agreement to repurchase them in the future at the same price plus a contract rate of interest). The fair value of the securities underlying reverse repurchase agreements normally exceeds the cash received, providing the dealers a margin against a decline in the fair value of the securities.

If the dealers default on their obligations to resell these securities to the OST or provide securities or cash of equal value, the retirement funds would suffer an economic loss equal to the difference between the fair value plus accrued interest of the underlying securities and the agreement obligation, including accrued interest.

During fiscal year 2016, the OST did not engage in reverse repurchase activity and it incurred no losses by default, nor recovered prior period losses, from these transactions. As of June 30, 2016, no obligations were under reverse repurchase agreements.

Credit Risk: The OST limits its credit risk with an investment policy that restricts the types of investments in which the OST can participate. Additionally, the OST investment policy requires that any securities on loan be made available by the lending agent for next day liquidity at the option of the OST. During fiscal year 2016, the OST had no credit-risk exposure to borrowers because the amounts owed to the borrowers exceeded the amounts the borrowers owed the OST.

## Notes to the Financial Statements (cont.)

Derivatives Schedule
Significant Terms for Derivatives Held as Investments by the WSIB - Dollars in Thousands

|  |  | Changes in Fair Value <br> - Included in <br> Investment Income | Fair Value as of <br> June 30, 2016 <br> Investment Derivative |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Classification |  |  |  |

Custodial Credit Risk: The OST investment policy requires that securities purchased be held by the master custodian, acting as an independent third party, in its safekeeping or trust department. Securities-utilized repurchase agreements are subject to additional restrictions. These restrictions are designed to limit the OST's exposure to risk and ensure the safety of the investment.

During fiscal year 2016, there were no violations of legal or contractual provisions or any losses resulting from a default by either borrowers or securities lending agents.

Derivatives: Derivative management responsibilities are described in the following paragraphs.

WSIB: The WSIB is authorized to use various derivative financial instruments, including financial futures, forward contracts, interest rate swaps, credit default swaps, equity swaps and options. Derivative transactions involve, to varying degrees, market and credit risk. As of June 30, 2016, the retirement funds held investments in financial futures and forward currency contracts that are recorded at fair value with changes in value recognized in investment income in the SCFNP in the period of change. For accounting and reporting purposes, the derivative instruments are considered investment derivatives, not hedging derivatives.

Derivatives are generally used to achieve the desired
market exposure of a security, index or currency; adjust portfolio duration; or rebalance the total portfolio to the target asset allocation. Derivative contracts are instruments that derive their value from underlying assets, indices, reference interest rates or a combination of these factors. A derivative instrument could be a contract negotiated on behalf of the retirement funds and a specific counterparty. This would typically be referred to as an "over-the-counter (OTC) contract," such as forward contracts. Alternatively, derivative instruments, such as futures, could be listed and traded on an exchange and referred to as "exchange traded." Derivatives that are exchange traded are not subject to credit risk.

Inherent in the use of OTC derivatives, the retirement funds are exposed to counterparty credit risk on all open OTC positions. "Counterparty credit risk" is the risk that a derivative counterparty might fail to meet its payment obligation under the derivative contract. As of June 30, 2016, the retirement funds' counterparty risk was deemed insignificant.

Futures contracts are standardized, exchange-traded contracts to purchase or sell a specific financial instrument at a predetermined price. Gains and losses on futures contracts are settled daily based on an underlying principal value and do not involve an actual transfer of the specific instrument. The exchange assumes the risk that the counterparty will not pay and generally requires margin payments to minimize such

## Notes to the Financial Statements (cont.)

risk. Futures are generally used to achieve the desired market exposure of a security or index or to rebalance the total porffolio.

Forward currency contracts are agreements to exchange the currency of one country for the currency of another country at an agreed-upon price and settlement date. These forward commitments are not standardized and carry credit risk due to the possible nonperformance of one of the counterparties. The maximum potential loss is the aggregate face value in U.S. dollars at the time the contract was opened; however, the likelihood of such a loss is remote.

As of June 30, 2016, the retirement funds had outstanding forward currency contracts with a net unrealized gain of $\$ 10.3$ million, which is included in the accompanying SCFNP. The contracts have varying maturity dates ranging from July 1, 2016, through September 21, 2016.

As of June 30, 2016, the counterparties' credit ratings for forward currency contracts that are subject to credit risk had a credit rating of no less than A3 using Moody's rating scale.

As of June 30, 2016, the retirement funds' fixed income porffolio held derivative securities consisting of collateralized mortgage obligations of $\$ 59.6$ million. Domestic and foreign passive equity index fund managers may also use various derivative securities to manage exposure to risk and increase porffolio returns. Information on passive equity index fund managers' use and holdings of derivative securities is unavailable.

The schedule on page 40 presents the significant terms for derivatives held as investments by the WSIB.

OST: The OST did not engage in derivative transactions during fiscal year 2016.

## Deferred Compensation Program (DCP), Judicial

 Retirement Account (JRA) and Defined Contribution - Self Plan Assets: The assets within DCP, JRA and Self investments total $\$ 7.8$ billion and represent less than $9 \%$ of the total investments DRS administers. Withdrawals from the options are restricted to those who have left employment (except in the case of hardship withdrawals from DCP). The participants/ members own these assets, have full control over their investment choices and assume the responsibility for the results of those choices.
## Investment Maturities

As of June 30, 2016 - Dollars in Thousands

|  | Maturity |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type | Fair Value |  | Less Than 1 Year |  | 1-5 Years |  | 6-10 Years |  | More Than 10 Years |  | Effective Duration |
| Corporate Bonds | \$ | 613,258 | \$ | 83,261 | \$ | 280,990 | \$ | 244,297 | \$ | 4,710 | 4.50 |
| Foreign Government and Agency Securities |  | 60,652 |  | 7,176 |  | 20,439 |  | 33,037 |  | - | 5.20 |
| Total | \$ | 673,910 | \$ | 90,437 | \$ | 301,429 | \$ | 277,334 | \$ | 4,710 |  |

## Credit Ratings (Moody's Equivalent)

As of June 30, 2016 - Dollars in Thousands

|  | Moody's Equivalent Credit Rating |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type | Fair Value | Aaa |  | Aa1 |  | Aa2 | Aa3 | A1 | A2 | A3 | Baa1 | Baa2 | Ba33 | Ba1 or Lower |
| Corporate Bonds | \$613,258 | \$ 27,328 | \$ | 1,661 | \$ | 3,959 | \$ 46,392 | \$ 72,868 | \$ 82,902 | \$ 89,942 | \$ 86,164 | \$ 78,908 | \$ 90,048 | \$ 33,086 |
| Foreign Government and Agency Securities | 60,652 | 12,057 |  | - |  | 8,442 | 26,887 | 1,226 | - | - | 4,133 | 2,121 | 4,119 | 1,669 |
| Total | \$673,910 | \$ 39,385 | \$ | 1,661 |  | 12,400 | \$ 73,279 | \$ 74,094 | \$ 82,902 | \$ 89,942 | \$ 90,296 | \$ 81,028 | \$ 94,167 | \$ 34,755 |

## Notes to the Financial Statements (cont.)

The composition of these assets is:

- $46 \%$ Retirement Strategy Funds (Target Date Funds)
- $25 \%$ Equity Index Funds
- $11 \%$ Guaranteed Investment Contracts (GIC)
- 6\% Short-Term Investment Fund
- $3 \%$ U.S. Socially Responsible Fund
- $9 \%$ Bond Fund

Refer to the tables on page 41 for the maturities, effective duration and credit ratings of its underlying securities.

Management Fees: The fees the WSIB paid are accounted for as a reduction of investment income or are netted directly from the asset value of the retirement funds' investments. These fees include investment management fees and commissions, investment consultant fees, and legal fees.

As of June 30, 2016, total investment management fees paid were $\$ 343.1$ million and total netted fees were $\$ 15.8$ million. For a detailed disclosure, refer to the "Schedule of Investment Expenses" in the "Supporting Schedules" of the Financial Section of this report.

Unfunded Commitments: The WSIB has entered into agreements that commit the DRS pension funds, upon request, to make additional investment purchases up to a predetermined amount. As of June 30, 2016, the retirement funds had the following unfunded investment commitments:

| Unfunded Commitments <br> As of June 30, 2016 — Dollars in Millions |  |  |
| :--- | ---: | ---: |
| Private Equity | $\$$ | $12,940.5$ |
| Real Estate | $\$$ | $7,762.1$ |
| Innovation Portfolio | $\$$ | 21.9 |
| Tangible Assets | $\$$ | $3,155.1$ |

## I. Reserves

Member Reserves: Member reserves reflect the total liability for all contributions members make. Employee contributions and interest earnings increase these reserves. Contribution refunds and transfers to the benefit reserves for current-year retirees decrease these
reserves. The member reserves are considered fully funded.

Because PERS Plan 3, SERS Plan 3 and TRS Plan 3 defined contribution plans each offer two separate investment programs to members, DRS maintains two separate member reserves for each defined contribution plan. The reserves the WSIB manages account for members who participate in the WSIB's Total Allocation Porffolio (TAP). The reserves for Self account for members who participate in the self-directed investment offerings.

Member reserves as of June 30, 2016 and 2015, are as follows:

|  |  | 6/30/2016 |  | 6/30/2015 |
| :---: | :---: | :---: | :---: | :---: |
| PERS Plan 1 | \$ | 509,696 | \$ | 592,792 |
| PERS Plan 2/3 |  | 6,158,740 |  | 5,739,362 |
| PERS Plan 3 - WSIB |  | 1,484,245 |  | 1,431,839 |
| PERS Plan 3 - Self |  | 996,170 |  | 986,350 |
| SERS Plan 2/3 |  | 481,862 |  | 444,825 |
| SERS Plan 3 -WSIB |  | 1,272,515 |  | 1,259,742 |
| SERS Plan 3 - Self |  | 429,003 |  | 428,729 |
| PSERS Plan 2 |  | 171,872 |  | 146,187 |
| TRS Plan 1 |  | 219,887 |  | 295,734 |
| TRS Plan 2/3 |  | 675,956 |  | 623,425 |
| TRS Plan 3 - WSIB |  | 4,556,884 |  | 4,429,634 |
| TRS Plan 3 - Self |  | 2,810,225 |  | 2,801,545 |
| LEOFF Plan 1 |  | 13,497 |  | 16,987 |
| LEOFF Plan 2 |  | 2,521,679 |  | 2,411,042 |
| WSPRS Plan 1/2 |  | 87,525 |  | 86,466 |
| JRS |  | - |  | - |
| JRF |  | - |  | - |
| Total Member Reserves | \$ | 22,389,756 | \$ | 21,694,659 |

Benefit Reserves: The benefit reserves reflect the funded liability associated with all retired members of DRS-administered systems. These reserves are increased by employer contributions, state contributions, investment earnings and employee contributions that are attributable to current-year retirees. These reserves are decreased by the amounts of pensions actually paid in the current year, interest payments transferred to the member reserves and administrative expenses in support of the trust funds.

## Notes to the Financial Statements (cont.)

Benefit reserves as of June 30, 2016 and 2015, are as follows:

| Benefit Reserves as of June 30, 2016 and 2015 Dollars in Thousands |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |
| PERS Plan 1 | \$ | 6,616,706 | \$ | 6,965,520 |
| PERS Plan $2 / 3$ |  | 24,323,885 |  | 23,772,597 |
| SERS Plan $2 / 3$ |  | 3,732,178 |  | 3,622,452 |
| PSERS Plan 2 |  | 228,844 |  | 206,574 |
| TRS Plan 1 |  | 5,367,134 |  | 5,773,853 |
| TRS Plan $2 / 3$ |  | 10,122,970 |  | 9,753,606 |
| LEOFF Plan 1 |  | 5,357,372 |  | 5,593,163 |
| LEOFF Plan 2 |  | 7,673,990 |  | 7,409,453 |
| LEOFF Plan 2 - Medical |  | 14,951 |  | 12,173 |
| WSPRS Plan 1/2 |  | 1,010,521 |  | 1,024,084 |
| WSPRS Plan 1/2-Medical |  | 82 |  | 76 |
| JRS |  | 6,776 |  | 6,333 |
| JRF |  | 581 |  | 514 |
| Total Benefit Reserves | \$ | 64,455,990 | \$ | 64,140,398 |

The funded status of each of the benefit reserves is the same as the funded status of each of the respective pension plans, which is shown in the "Solvency Test" schedules in the Actuarial Section of this CAFR.

## J. Capital Assets

All capital assets with a unit cost (including ancillary costs) of \$5,000 or greater are capitalized and reported in the accompanying financial statements. Capital leases with a net present value or fair market value, whichever is less, of $\$ 10,000$ or more are capitalized and also included in these financial statements. All purchased capital assets are valued at cost when historical records exist. Donated capital assets are valued at their estimated fair market value on the date of donation. Where necessary, estimates of original cost and fair market value are derived by factoring price levels from the current period to the time of acquisition.

Capital asset costs include the purchase price or construction cost plus those costs necessary to place the asset in its intended location and condition for use. Normal maintenance and repair costs that do not materially add to the value or extend the life of the asset are not capitalized.

Depreciation is calculated using the Straight-Line Method with estimated useful lives of five to 50 years for buildings and three to 50 years for furnishings and equipment, other improvements, and miscellaneous capital assets.

The following is a summary of changes in capital assets for fiscal year 2016:

| Changes in Capital Assets <br> For Fiscal Year 2016 - Dollars in Thousands |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets | Beginning Balance | Acquisition/ Increase Depreciation | Disposal | Ending Balance |
| Improvements Other Than Buildings | \$ 645 | \$ - | \$ | \$ 645 |
| Furnishing and Equipment | 1,851 | 66 | - | 1,917 |
| Accumulated Depreciation | $(2,286)$ | (79) | - | $(2,365)$ |
| Total | \$ 210 | \$ (13) | \$ | \$ 197 |

## K. Leases

DRS leases office facilities and office and computer equipment. Lease terms vary. Leases are considered noncancelable for financial reporting purposes. All DRS leases are classified as operating leases with the lease payments recorded as expenditures or expenses during the life of the lease. Certain operating leases are renewable for specified periods. In most cases, management expects that the leases will be renewed or replaced by other leases.

The following schedule presents future minimum payments for operating leases as of June 30, 2016:

Future Minimum Payments for Operating Leases As of June 30, 2016 - Dollars in Thousands

| Fiscal Year | Payments |  |
| :--- | ---: | ---: |
| 2016 | $\$$ | 1,467 |
| 2017 | 1,512 |  |
| 2018 | 1,511 |  |
| 2019 | 1,085 |  |
| 2020 | 208 |  |
| 2021 and beyond | 31 |  |
| Total Future Minimum Payment | $\mathbf{\$}$ | $\mathbf{5 , 8 1 4}$ |

The total operating lease rental expenditure for fiscal year 2016 was $\$ 1.5$ million.

## Notes to the Financial Statements (cont.)

## L. Other Long-Term Obligations

Annual Leave: DRS employees accrue annual leave at a variable rate based on years of service. In general, accrued annual leave cannot exceed 30 days at the employee's anniversary date. The expense and accrued liability is recognized when the annual leave is earned.
DRS' liability for accumulated annual leave was $\$ 0.9$ million as of June 30, 2016.

Sick Leave: Employees accrue sick leave at the rate of one day per month without limitation on the amount that can be accumulated. Sick leave is not vested (that is, the department does not pay employees for unused sick leave upon termination except in the event of the employee's death or retirement; at such time, DRS is liable for $25 \%$ of the employee's accumulated sick leave).

In addition, the state has a sick-leave buyout option. Each January, employees who have accumulated sick leave in excess of 60 days may redeem sick leave earned but not taken during the previous year at the rate of one day's pay in exchange for four days of sick leave. The expense and accrued liability is recognized when the sick leave is earned. DRS' liability for accumulated sick leave was $\$ 0.4$ million as of June 30 , 2016.

The following is a summary of changes in compensated absences for the fiduciary funds for fiscal year 2016:

| Changes in Compensated Absences For Fiscal Year 2016 - Dollars in Thousands |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Compensated Absences | Beginning Balance |  | Additions |  | Deletions |  | Ending Balance |  |
| Annual Leave | \$ | 933 | \$ | 1,115 | \$ | $(1,050)$ | \$ | 998 |
| Sick Leave |  | 420 |  | 158 |  | (145) |  | 433 |
| Total | \$ | 1,353 | \$ | 1,273 | \$ | $(1,195)$ | \$ | 1,431 |

## M. Transfers

Transfers from and to other pension plans, as reported in the financial statements, typically reflect routine transfers among the various trust funds resulting from plan membership changes and member-directed defined contribution plan selections. In fiscal year 2016, these transfers totaled $\$ 5.9$ million and represented a $\$ 1.1$ million increase from the previous year.

## N. Contingencies - Litigation

As a state agency, DRS is party to legal proceedings that normally occur in governmental operations.
Pending legal actions involving DRS exist. For each pending legal action, DRS has good defenses and will continue to bring a vigorous defense to each case.

## O. Adoption of New Accounting Standards

 GASB Statement No. 72, Fair Value Measurement and Application, became effective for financial statements for fiscal years beginning after June 15, 2015. The statement addresses accounting and reporting issues related to fair value measurements and requires disclosures be made about fair value measurements, the level of fair value hierarchy and valuation techniques. This report has been prepared to conform with this newly adopted GASB statement.
## Notes to the Financial Statements (cont.)

## Note 2: General Description of the Retirement Systems

## A. General

The state Legislature establishes and amends laws pertaining to the creation and administration of all public retirement systems. As established in the Revised Code of Washington (RCW) Chapter 41.50, the Department of Retirement Systems (DRS) administers eight retirement systems covering eligible employees of the state and local governments.

The governor appoints the director of DRS.

Cost-Sharing, Multiple-Employer Plans<br>Public Employees' Retirement System (PERS)<br>Plan 1: Defined benefit<br>Plan 2: Defined benefit<br>Plan 3: Defined benefit/defined contribution<br>School Employees' Retirement System (SERS)<br>Plan 2: Defined benefit<br>Plan 3: Defined benefit/defined contribution<br>Public Safety Employees' Retirement System (PSERS)<br>Plan 2: Defined benefit<br>Teachers' Retirement System (TRS)<br>Plan 1: Defined benefit<br>Plan 2: Defined benefit<br>Plan 3: Defined benefit/defined contribution<br>Law Enforcement Officers' and Fire Fighters'<br>Retirement System (LEOFF)<br>Plan 1: Defined benefit

Administration of the retirement systems is funded by a current employer rate of $0.18 \%$ of reported compensation.

The retirement systems are composed of 12 defined benefit pension plans and three combination defined benefit plans that have defined contribution components.

They include:

## Single-Employer Plans

## Washington State Patrol Retirement System (WSPRS)

Plan 1: Defined benefit

Plan 2: Defined benefit
Judicial Retirement System (JRS)
Defined benefit

Judges' Retirement Fund (JRF)
Defined benefit

## Notes to the Financial Statements (cont.)

## Number of Participating Members

As of June 30, 2016

| Plan | $\begin{array}{r} \text { Retirees and } \\ \text { Beneficiaries } \\ \text { Receiving Benefits } \end{array}$ | Terminated Members Entitled to But Not Yet Receiving Benefits | Active Plan Members Vested | Active Plan Members Nonvested | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PERS Plan 1 | 49,417 | 827 | 3,021 | 209 | 53,474 |
| PERS Plan 2 | 42,706 | 54,916 | 82,809 | 37,290 | 217,721 |
| PERS Plan 3 | 3,693 | 5,238 | 13,871 | 19,052 | 41,854 |
| SERS Plan 2 | 7,391 | 5,704 | 13,430 | 12,697 | 39,222 |
| SERS Plan 3 | 6,715 | 7,899 | 19,470 | 12,939 | 47,023 |
| PSERS Plan 2 | 108 | 400 | 3,091 | 2,390 | 5,989 |
| TRS Plan 1 | 34,859 | 223 | 949 | 13 | 36,044 |
| TRS Plan 2 | 4,700 | 2,443 | 7,449 | 10,163 | 24,755 |
| TRS Plan 3 | 8,866 | 8,373 | 36,635 | 16,782 | 70,656 |
| LEOFF Plan 1 | 7,431 | 1 | 62 | - | 7,494 |
| LEOFF Plan 2 | 4,508 | 839 | 13,966 | 3,355 | 22,668 |
| WSPRS Plan 1 | 1,078 | 76 | 498 | - | 1,652 |
| WSPRS Plan 2 | - | 28 | 291 | 179 | 498 |
| JRS | 103 | - | - | - | 103 |
| JRF | 12 | - | - | - | 12 |

## Number of Participating Employers

As of June 30, 2016

| Plan | Component Units of the State of Washington | Counties/Municipalities | School Districts | Other Political Subdivisions | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PERS Plan 1 | 115 | 123 | 191 | 120 | 549 |
| PERS Plan 2 | 153 | 278 | - | 515 | 946 |
| PERS Plan 3 | 145 | 212 | - | 330 | 687 |
| SERS Plan 2 | - | - | 307 | - | 307 |
| SERS Plan 3 | - | - | 306 | - | 306 |
| PSERS Plan 2 | 6 | 64 | - | 1 | 71 |
| TRS Plan 1 | 31 | - | 189 | - | 220 |
| TRS Plan 2 | 28 | - | 305 | - | 333 |
| TRS Plan 3 | 40 | - | 310 | - | 350 |
| LEOFF Plan 1 | - | 23 | - | 6 | 29 |
| LEOFF Plan 2 | 8 | 204 | - | 164 | 376 |
| WSPRS Plan 1 | 1 | - | - | - | 1 |
| WSPRS Plan 2 | 1 | - | - | - | 1 |
| JRS | - | - | - | - | - |
| JRF | - | - | - | - | - |

Employers can participate in multiple systems and/or plans. The actual total number of participating employers as of June 30, 2016, is 1,336 . Of that number, 153 are component units of the state. For a list of covered employers, refer to the Statistical Section of this report.

## Notes to the Financial Statements (cont.)

## B. System and Plan Descriptions

## Public Employees' Retirement System (PERS)

Administration: PERS was established in 1947, and its retirement benefit provisions are contained in Chapters 41.34 and 41.40 RCW. PERS is a cost-sharing, multiple-employer retirement system composed of three separate pension plans for membership purposes. PERS Plan 1 and PERS Plan 2 are defined benefit plans, and PERS Plan 3 is a defined benefit plan with a defined contribution component.

PERS members include elected officials, state employees, employees of local governments and higher education employees not participating in higher education retirement programs (HERPs).

PERS is composed of and reported as three separate plans for accounting purposes: Plan 1, Plan $2 / 3$ and Plan 3. Plan 1 accounts for the defined benefits of Plan 1 members. Plan $2 / 3$ accounts for the defined benefits of Plan 2 members and the defined benefit portion of benefits for Plan 3 members. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

Although employees can only be a member of either Plan 2 or Plan 3, the defined benefits of Plan 2 and Plan 3 are accounted for in the same pension trust fund. All assets of Plan $2 / 3$ may legally be used to pay the defined benefits of any of the Plan 2 or Plan 3 members or beneficiaries. Therefore, Plan $2 / 3$ is considered a single plan for accounting purposes.

## PERS Plan 1

As of June 30, 2016, 435 employers and 703 nonemployer contributing entities were participating in PERS Plan 1. The plan is closed to new entrants.

Plan Membership: As of June 30, 2016, PERS Plan 1 membership consisted of the following:

| PERS Plan 1 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 49,417 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 827 |
| Active Plan Members | 3,230 |
| Total Membership | $\underline{\mathbf{5 3 , 4 7 4}}$ |

Vesting: PERS Plan 1 members became vested after the completion of five years of eligible service.

Benefits Provided: PERS Plan 1 provides retirement, disability and death benefits. Retirement benefits are calculated as $2 \%$ times the member's Average Final Compensation (AFC) times the member's years of service. AFC is the average of the member's 24 consecutive highest-paid service credit months. Members are eligible for retirement from active status at any age with at least 30 years of service, at age 55 with at least 25 years of service or at age 60 with at least five years of service.

PERS Plan 1 retirement benefits are actuarially reduced if a survivor benefit is chosen. Members retiring from inactive status before the age of 65 may also receive actuarially reduced benefits. Other benefits include duty and nonduty disability payments, an optional Cost-ofLiving Adjustment (COLA), and a duty-related death benefit, if determined eligible by the Washington State Department of Labor \& Industries.

Contributions: The PERS Plan 1 member contribution rate is established by statute at $6 \%$. The employer contribution rate is developed by the Office of the State Actuary (OSA) and includes an administrative expense component that is currently set at $0.18 \%$.

The PERS Plan 1 required contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

| PERS Plan 1 |  |  |
| :--- | ---: | ---: |
| Actual Contribution Rates | Employer | Employee |
| State Agencies | $11.18 \%$ | $6.00 \%$ |
| Local Governmental Units | $\mathbf{1 1 . 1 8 \%}$ | $6.00 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private

## Notes to the Financial Statements (cont.)

equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on PERS Plan 1 pension investments, net of pension plan investment expense, was $2.19 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of PERS Plan 1 as of June 30, 2016, were as follows:

```
PERS Plan 1
Dollars in Thousands
```

| Total Pension Liability | $\$$ | $12,496,872$ <br> $(7,126,401)$ <br> Plan Fiduciary Net Position |
| :--- | ---: | ---: |
| Participating Employers' Net Pension Liability | $\mathbf{\$}$ | $\mathbf{5 , 3 7 0 , 4 7 1}$ |
| Plan Fiduciary Net Position as a Percentage of the |  | $57.03 \%$ | Total Pension Liability

Actuarial Assumptions ${ }^{2}$ : The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| PERS Plan 1 |  |
| :--- | :--- |
| Inflation | 3.0\% total economic inflation, 3.75\% salary inflation |
| Salary | In addition to the base 3.75\% salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

Mortality rates were based on the RP-2000 report's
Combined Healthy Table and Combined Disabled

Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional

[^2]
## Notes to the Financial Statements (cont.)

information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

| PERS Plan 1 |  |  |
| :--- | ---: | ---: |
| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent longterm estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates (including PERS Plan 2/3, PSERS Plan 2 and SERS Plan $2 / 3$ employers, whose rates include a component for the PERS Plan 1 liability). Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate: The following table presents the net pension liability of the employers calculated using the
discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower ( $6.50 \%$ ) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.

PERS Plan 1
Dollars in Thousands

|  | 1\% Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate (7.50\%) | $\mathbf{1 \%}$ Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Employers' Net <br> Pension Liability | $\$ 6,476,248$ | $\$$ | $5,370,471$ | $\$ 4,418,882$ |
|  |  |  |  |  |
| PERS Plan 2/3 |  |  |  |  |
| As of June 30, 2016, 794 employers were |  |  |  |  |
| participating in PERS Plan 2/3. |  |  |  |  |

Plan Membership: As of June 30, 2016, PERS Plan 2/3 membership consisted of the following:

| PERS Plan 2/3 |  |  |
| :--- | ---: | ---: |
|  | Plan 2 | Plan 3 |
| Inactive Plan Members or Beneficiaries Currently <br> Receiving Benefits | 42,706 | 3,693 |
| Inactive Plan Members Entitled to But Not Yet <br> Receiving Benefits | 54,916 | 5,238 |
| Active Plan Members 120,099 32,923 <br> Total Membership $\underline{\mathbf{2 1 7 , 7 2 1}}$ $\mathbf{4 1 , 8 5 4}$ |  |  |

Vesting: PERS Plan 2 members are vested after completing five years of eligible service. Plan 3 members are vested in the defined benefit portion of their plan after 10 years of service or after five years of service if 12 months of that service was earned after age 44.

Benefits Provided: PERS Plan $2 / 3$ provides retirement, disability and death benefits. Retirement benefits for Plan 2 are calculated as $2 \%$ times the member's Average Final Compensation (AFC) times the member's years of service. Retirement defined benefits for Plan 3 are calculated using $1 \%$ times the member's AFC times the member's years of service. AFC is the monthly average of the member's 60 consecutive highest-paid service credit months.

Members are eligible for retirement with a full benefit at 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. PERS

## Notes to the Financial Statements (cont.)

Plan $2 / 3$ members who have at least 20 years of service credit and are 55 years of age or older are eligible for early retirement with a reduced benefit. The benefit is reduced by a factor that varies according to age for each year before age 65 .

PERS Plan $2 / 3$ retirement benefits are actuarially reduced if a survivor benefit is chosen.

Other PERS Plan $2 / 3$ benefits include duty and nonduty disability payments; a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at $3 \%$ annually; and a duty-related death benefit, if determined eligible by the Washington State Department of Labor \& Industries.

Contributions: The PERS Plan $2 / 3$ employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2 and the defined benefit portion of Plan 3. The Plan $2 / 3$ employer rates include an administrative expense that is currently set at $0.18 \%$ and a component to address the PERS Plan 1 unfunded actuarial accrued liability.

The PERS Plan $2 / 3$ required contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

| PERS Plan 2/3 |  |  |  |
| :--- | ---: | ---: | ---: |
| Actual Contribution Rates | Employer | Employee <br> Plan 2 | Employee <br> Plan 3 |
| State Agencies | $11.18 \%$ | $6.12 \%$ | $0 \%$ |
| Local Governmental Units | $11.18 \%$ | $6.12 \%$ | $0 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private
equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on PERS Plan 2/3 pension investments, net of pension plan investment expense, was $2.47 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of PERS Plan $2 / 3$ as of June 30, 2016, were as follows:

## PERS Plan $2 / 3$ <br> Dollars in Thousands

| Total Pension Liability | \$ | $35,517,545$ <br> $(30,482,624)$ |
| :--- | ---: | ---: |
| Plan Fiduciary Net Position |  | $\mathbf{5 , 0 3 4 , \mathbf { 9 2 1 }}$ |
| Participating Employers' Net Pension Liability | $\mathbf{\$}$ | $85.82 \%$ | Total Pension Liability

Actuarial Assumptions ${ }^{2}$ : The total pension liability was determined by an actuarial valuation as of June 30, 2015 , with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| PERS Plan 2/3 |  |
| :--- | :--- |
| Inflation | $3.0 \%$ total economic inflation, 3.75\% salary inflation |
| Salary | In addition to the base $3.75 \%$ salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment $7.50 \%$ <br> Rate of Return  |  |

[^3]50 DRS $\nabla$ Financial Section - Comprehensive Annual Financial Report

## Notes to the Financial Statements (cont.)

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

| PERS Plan 2/3 | Long-Term Expected <br> Real Rate of Return |  |
| :--- | ---: | ---: |
| Asset Class | $20.00 \%$ | $1.70 \%$ |
| Fixed Income Allocation | $5.00 \%$ | $4.40 \%$ |
| Tangible Assets | $15.00 \%$ | $5.80 \%$ |
| Real Estate | $37.00 \%$ | $6.60 \%$ |
| Global Equity | $23.00 \%$ | $9.60 \%$ |
| Private Equity |  |  |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent longterm estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the longterm expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

## Sensitivity of the Net Pension Liability to Changes in the Discount Rate: The table on the top of page 52 presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage

## Notes to the Financial Statements (cont.)

point lower ( $6.50 \%$ ) or 1 percentage point higher $(8.50 \%)$ than the current rate.

## PERS Plan 2/3

Dollars in Thousands

|  | $\mathbf{1 \%}$ Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate $\mathbf{( 7 . 5 0 \% )}$ | $\mathbf{1 \%}$ Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |
| :--- | ---: | ---: | ---: | ---: |
| Employers' Net | $\$$ | $9,270,195$ | $\$$ | $5,034,921$ |$\$(2,620,967)$

## PERS Plan 3

As of June 30, 2016, 543 employers were participating in PERS Plan 3.

Plan Membership: As of June 30, 2016, PERS Plan 3 membership consisted of the following:

| PERS Plan 3 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 3,693 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 5,238 |
| Active Plan Members | $\underline{32,923}$ |
| Total Membership | $\underline{\mathbf{4 1 , 8 5 4}}$ |

Vesting: PERS Plan 3 members are immediately vested in the defined contribution portion of their plan.

Benefits Provided: PERS Plan 3 defined contribution benefits are totally dependent on employee contributions and investment earnings on those contributions.

Contributions: PERS Plan 3 members choose their contribution rate when joining membership and can change rates only when changing employers. As established by Chapter 41.34 RCW, Plan 3 defined contribution rates are set at a minimum of $5 \%$ and a maximum of $15 \%$; members have six rate options. Employers do not contribute to the defined contribution benefits.

## School Employees' Retirement System (SERS)

Administration: The Legislature created SERS in 1998, and the plan became effective in 2000 . SERS retirement benefit provisions are established in Chapters 41.34 and 41.35 RCW. SERS members include classified employees of school districts and educational service districts. SERS is a cost-sharing, multiple-employer retirement system composed of two separate plans for
membership purposes. SERS Plan 2 is a defined benefit plan, and SERS Plan 3 is a defined benefit plan with a defined contribution component.

Although employees can only be a member of either Plan 2 or Plan 3, the defined benefit portions of Plan 2 and Plan 3 are accounted for in the same pension trust fund. All assets of the Plan $2 / 3$ defined benefit plan may legally be used to pay the defined benefits of any of the Plan 2 or Plan 3 members or beneficiaries. Therefore, Plan $2 / 3$ is considered to be a single plan for accounting purposes. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

SERS Plan 2/3
As of June 30, 2016, 307 employers were participating in SERS Plan $2 / 3$.

Plan Membership: As of June 30, 2016, SERS Plan 2/3 membership consisted of the following:

| SERS Plan 2/3 |  |  |
| :--- | ---: | ---: |
|  | Plan 2 | Plan 3 |
| Inactive Plan Members or Beneficiaries Currently <br> Receiving Benefits | 7,391 | 6,715 |
| Inactive Plan Members Entitled to But Not Yet Receiving <br> Benefits | 5,704 | 7,899 |
| Active Plan Members | 26,127 | 32,409 |
| Total Membership | $\underline{\mathbf{3 9 , 2 2 2}}$ | $\mathbf{4 7 , 0 2 3}$ |

Vesting: SERS Plan 2 members are vested after completing five years of eligible service. SERS Plan 3 members are vested in the defined benefit portion of their plan after 10 years of service or after five years of service if 12 months of that service was earned after age 44.

Benefits Provided: SERS Plan $2 / 3$ provides retirement, disability and death benefits. Retirement benefits for Plan 2 are calculated as $2 \%$ times the member's Average Final Compensation (AFC) times the member's years of service for Plan 2. Retirement benefits for Plan 3 are calculated using $1 \%$ times the member's AFC times the member's years of service. AFC is the monthly average of the member's 60 consecutive highest-paid service credit months.

Members are eligible for retirement with a full benefit at

## Notes to the Financial Statements (cont.)

65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. SERS members who have at least 20 years of service credit and are 55 years of age or older are eligible for early retirement with a reduced benefit. The benefit is reduced by a factor that varies according to age for each year before age 65 .

SERS Plan $2 / 3$ retirement benefits are actuarially reduced if a survivor benefit is chosen.

Other SERS Plan $2 / 3$ benefits include duty and nonduty disability payments; a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at $3 \%$ annually; and a duty-related death benefit, if determined eligible by the Washington State Department of Labor \& Industries.

Contributions: The SERS Plan $2 / 3$ employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund the defined benefits of Plan $2 / 3$. The employer rate includes an administrative expense currently set at $0.18 \%$ and a component to address the PERS Plan 1 unfunded actuarial accrued liability.

The SERS Plan 2/3 required defined benefit contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

| SERS Plan 2/3 |  |  |  |
| :--- | ---: | ---: | ---: |
| Actual Contribution Rates | Employer | Employee <br> Plan 2 | Employee <br> Plan 3 |
| State Agencies | $11.58 \%$ | $5.63 \%$ | $0 \%$ |
| Local Governmental Units | $11.58 \%$ | $5.63 \%$ | $0 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust

Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on SERS Plan $2 / 3$ pension investments, net of pension plan investment expense, was $2.49 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of SERS Plan $2 / 3$ as of June 30,2016 , were as follows:

```
SERS Plan 2/3
Dollars in Thousands
```

| Total Pension Liability | $\$$ | $4,870,806$ |
| :--- | :---: | ---: |
| Plan Fiduciary Net Position |  | $(4,214,039)$ |
| Participating Employers' Net Pension Liability | $\mathbf{\$}$ | $\mathbf{6 5 6 , 7 6 7}$ |
| Plan Fiduciary Net Position as a Percentage of the |  | $86.52 \%$ | Total Pension Liability

Actuarial Assumptions ${ }^{2}$ : The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| SERS Plan $\mathbf{2 / 3}$ |  |
| :--- | :--- |
| Inflation | $3.0 \%$ total economic inflation, $3.75 \%$ salary inflation |
| Salary | In addition to the base $3.75 \%$ salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

[^4]
## Notes to the Financial Statements (cont.)

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this
assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation As of June 30, 2016, are summarized in the following table:

SERS Plan 2/3

| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| :--- | ---: | ---: |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent longterm estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

## Sensitivity of the Net Pension Liability to Changes in the

 Discount Rate: The table on the top of page 55 presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the
## Notes to the Financial Statements (cont.)

employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower ( $6.50 \%$ ) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.

```
SERS Plan 2/3
Dollars in Thousands
```

|  | 1\% Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate (7.50\%) | $\mathbf{1 \%}$ Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$ 1,600,655$ | $\$$ | 656,767 | $\$$ | $(75,324)$ |

SERS Plan 3
As of June 30, 2016, 306 employers were participating in SERS Plan 3.

Plan Membership: As of June 30, 2016, SERS Plan 3 membership consisted of the following:

| SERS Plan 3 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 6,715 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 7,899 |
| Active Plan Members | $\underline{32,409}$ |
| Total Membership | $\underline{\mathbf{4 7 , 0 2 3}}$ |

Vesting: SERS Plan 3 members are immediately vested in the defined contribution portion of their plan.

Benefits Provided: SERS Plan 3 defined contributions benefits are totally dependent on employee contributions and the investment earnings on those contributions.

Contributions: SERS Plan 3 members choose their contribution rate when joining membership and can change rates only when changing employers. As established by Chapter 41.34 RCW, Plan 3 defined contribution rates are set at a minimum of $5 \%$ and a maximum of $15 \%$; members have six rate options. Employers do not contribute to the defined contribution benefits.

## Public Safety Employees' Retirement System (PSERS)

Administration: The Legislature created PSERS in 2004, and the plan became effective July 1, 2006. PSERS retirement benefit provisions are established in Chapter 41.37 RCW. PSERS is a cost-sharing, multiple-employer
retirement system composed of a single defined benefit plan, PSERS Plan 2.

PSERS membership includes:

- PERS Plans 2 and 3 employees hired before July 1, 2006, who met the PSERS eligibility criteria and elected membership during the period of July 1, 2006, through September 30, 2006
- Employees hired on or after July 1, 2006, who meet PSERS eligibility criteria
- Covered employers of PSERS include:
» Certain Washington state agencies (for example, Department of Corrections, Department of Natural Resources, Gambling Commission, Liquor and Cannabis Board, Parks and Recreation Commission, and Washington State Patrol)
" Washington state counties
» Washington state cities (except Seattle, Spokane and Tacoma)
» Correctional entities PSERS employers form under the Interlocal Cooperation Act

To be eligible for PSERS, an employee must work full time and meet at least one of the following criteria:

- Have completed a certified criminal-justice training course with authority to arrest, conduct criminal investigations, enforce the criminal laws of Washington and carry a firearm as part of the job
- Have primary responsibility to ensure the custody and security of incarcerated or probationary individuals
- Function as a limited authority Washington peace officer, as defined in RCW 10.93.020
- Have primary responsibility to supervise eligible members who meet the above criteria

PSERS is composed of one plan for accounting purposes: Plan 2. Plan 2 accounts for the defined benefits of PSERS members.

## Notes to the Financial Statements (cont.)

## PSERS Plan 2

As of June 30, 2016, 66 employers were participating in PSERS Plan 2.

Plan Membership: As of June 30, 2016, PSERS Plan 2 membership consisted of the following:

| PSERS Plan 2 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 108 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 400 |
| Active Plan Members | 5,481 <br> Total Membership |
| $\mathbf{5 , 9 8 9}$ |  |

Vesting: PSERS members are vested after completing five years of eligible service.

Benefits Provided: PSERS Plan 2 provides retirement, disability and death benefits. Retirement benefits are calculated using $2 \%$ times the member's Average Final Compensation (AFC) times the member's years of service. AFC is based on the member's 60 consecutive highest-paid months of service credit.

Members are eligible for retirement at age 65 with five years of service, at age 60 with at least 10 years of PSERS service credit or at age 53 with 20 years of service. Benefits are actuarially reduced for each year the member's age is less than 60 (with 10 or more service credit years in PSERS) or less than 65 (with fewer than 10 service credit years).

There is no cap on years of service credit. Retirement before age 60 is considered an early retirement, and PSERS members who retire before turning 60 receive reduced benefits. If retirement is at age 53 or older with at least 20 years of service, a $3 \%$ per year reduction for each year between age at retirement and age 60 applies. PSERS retirement benefits are actuarially reduced if a survivor benefit is chosen.

Other PSERS Plan 2 benefits include duty and nonduty disability payments, an optional Cost-ofLiving Adjustment (COLA), and duty-related death benefit, if determined eligible by the Washington State Department of Labor \& Industries.

Contributions: The PSERS Plan 2 employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2. The employer rate includes an administrative expense that is currently set at $0.18 \%$ and a component to address the PERS Plan 1 unfunded actuarial accrued liability.

The PSERS Plan 2 required contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

## PSERS Plan 2

| Actual Contribution Rates | Employer | Employee |
| :--- | ---: | ---: |
| State Agencies | $11.54 \%$ | $6.59 \%$ |
| Local Governmental Units | $11.54 \%$ | $6.59 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on PSERS Plan 2 pension investments, net of pension plan investment expense, was $2.75 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

## Notes to the Financial Statements (cont.)

Net Pension Liability of Participating Employers
The components of the net pension liability of PSERS Plan 2 as of June 30, 2016, were as follows:

| PSERS Plan 2 |  |
| :--- | ---: |
| Dollars in Thousands |  |
| Total Pension Liability | 443,214 |
| Plan Fiduciary Net Position | $(400,716)$ |
| Participating Employers' Net Pension Liability | $\mathbf{4 2 , 4 9 8}$ |
| Plan Fiduciary Net Position as a Percentage of the | $90.41 \%$ |
| Total Pension Liability |  |

Total Pension Liability
Actuarial Assumptions': The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

## PSERS Plan 2

| Inflation | 3.0\% total economic inflation, 3.75\% salary inflation |
| :--- | :--- |
| Salary | In addition to the base 3.75\% salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of
pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

## PSERS Plan 2

| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| :--- | ---: | ---: |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent long-term estimate of broad economic inflation.

[^5]
## Notes to the Financial Statements (cont.)

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates (including PERS Plan 2/3, PSERS Plan 2 and SERS Plan 2/3 employers whose rates include a component for the PERS Plan 1 liability). Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

## Sensitivity of the Net Pension Liability to Changes in the

 Discount Rate: The table below presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower ( $6.50 \%$ ) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.
## PSERS Plan 2

Dollars in Thousands

|  | 1\% Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate (7.50\%) | 1\% Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$$ | 184,533 | $\$$ | 42,498 | $\$$ |
| Pension Liability |  |  |  |  | $(58,674)$ |

## Teachers' Retirement System (TRS)

Administration: TRS was established in 1938, and its retirement benefit provisions are contained in Chapters 41.32 and 41.34 RCW. TRS eligibility for membership requires service as a certificated public school employee working in an instructional, administrative or supervisory capacity. TRS is a cost-sharing,
multiple-employer retirement system composed of three separate plans for membership purposes: Plans 1 and 2 are defined benefit plans, and Plan 3 is a defined benefit plan with a defined contribution component.

TRS is composed of three separate plans for accounting purposes: Plan 1, Plan 2/3 and Plan 3. Plan 1 accounts for the defined benefits of Plan 1 members. Plan 2/3 accounts for the defined benefits of Plan 2 members and the defined benefit portion of benefits for Plan 3 members. Plan 3 accounts for the defined contribution portion of benefits for Plan 3 members.

Although members can only be a member of either Plan 2 or Plan 3, the defined benefit portions of Plan 2 and Plan 3 are accounted for in the same pension trust fund. All assets of the Plan 2/3 defined benefit plan may legally be used to pay the defined benefits of any of the Plan 2 or Plan 3 members or beneficiaries, as the terms of the plans define. Therefore, Plan $2 / 3$ is considered a single plan for accounting purposes.

## TRS Plan 1

As of June 30, 2016, 190 employers and 119 nonemployer contributing entities were participating in TRS Plan 1. The plan is closed to new entrants.

Plan Membership: As of June 30, 2016, TRS Plan 1 membership consisted of the following:

| TRS Plan 1 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 34,859 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 223 |
| Active Plan Members | 962 |
| Total Membership | $\mathbf{3 6 , 0 4 4}$ |

Vesting: TRS Plan 1 members became vested after the completion of five years of eligible service.

Benefits Provided: TRS Plan 1 provides retirement, disability and death benefits. Retirement benefits are calculated using $2 \%$ of the member's Average Final Compensation (AFC) times the member's years of service - up to a maximum of $60 \%$. AFC is the average of the member's 24 consecutive highest-paid service credit months.

## Notes to the Financial Statements (cont.)

Members are eligible for retirement at any age after 30 years of service, at age 60 with five years of service or at age 55 with 25 years of service. Other benefits include temporary and permanent disability payments, an optional Cost-of-Living Adjustment (COLA), and a one-time, duty-related death benefit, if found eligible by the Washington State Department of Labor \& Industries.

Contributions: The TRS Plan 1 member contribution rate is set by statute at $6 \%$. The employer contribution rate is developed by the Office of the State Actuary (OSA) and includes an administrative expense component currently set at $0.18 \%$.

The TRS Plan 1 required contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

| TRS Plan 1 |  |  |
| :--- | ---: | ---: |
| Actual Contribution Rates | Employer | Employee |
| State Agencies | $13.13 \%$ | $6.00 \%$ |
| Local Governmental Units | $13.13 \%$ | $6.00 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30,

2016, the annual money-weighted rate of return on TRS Plan 1 pension investments, net of pension plan investment expense, was $2.09 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of TRS Plan 1 as of June 30, 2016, were as follows:

TRS Plan 1
Dollars in Thousands

| Total Pension Liability | \$ | $9,001,257$ <br> $(5,587,020)$ <br> Plan Fiduciary Net Position |
| :--- | ---: | ---: |
| Participating Employers' Net Pension Liability | $\mathbf{\$}$ | $\mathbf{3 , 4 1 4 , 2 3 7}$ |
|  |  | $62.07 \%$ | Total Pension Liability

Actuarial Assumptions ${ }^{2}$ : The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| TRS Plan 1 |  |
| :--- | :--- |
| Inflation | 3.0\% total economic inflation, 3.75\% salary inflation |
| Salary | In addition to the base 3.75\% salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for

[^6]
## Notes to the Financial Statements (cont.)

subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

## TRS Plan 1

| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| :--- | ---: | ---: |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent longterm estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates (including TRS Plan $2 / 3$ employers, whose rates include a component for the TRS Plan 1 liability). Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

## Sensitivity of the Net Pension Liability to Changes in the

 Discount Rate: The table below presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower ( $6.50 \%$ ) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.TRS Plan 1
Dollars in Thousands

|  | 1\% Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate (7.50\%) | $\mathbf{1 \%}$ Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$$ | $4,197,137$ | $\$$ | $3,414,237$ | $\$$ |
| Pension Liability |  |  |  |  | $2,739,882$ |

## Notes to the Financial Statements (cont.)

TRS Plan 2/3
As of June 30, 2016, 306 employers were participating in TRS Plan 2/3.

Plan Membership: As of June 30, 2016, TRS Plan $2 / 3$ membership consisted of the following:

| TRS Plan 2/3 |  |  |
| :--- | ---: | ---: |
|  | Plan 2 | Plan 3 |
| Inactive Plan Members or Beneficiaries Currently <br> Receiving Benefits | 4,700 | 8,866 |
| Inactive Plan Members Entitled to But Not Yet Receiving <br> Benefits | 2,443 | 8,373 |
| Active Plan Members | 17,612 | 53,417 |
| Total Membership | $\underline{\mathbf{2 4 , 7 5 5}}$ | $\mathbf{7 0 , 6 5 6}$ |

Vesting: TRS Plan 2 members are vested after completing five years of eligible service. TRS Plan 3 members are vested in the defined benefit portion of their plan after 10 years of service or after five years of service if 12 months of that service are earned after age 44.

Benefits Provided: TRS Plan $2 / 3$ provides retirement, disability and death benefits. Retirement benefits for Plan 2 are calculated using $2 \%$ of the member's Average Final Compensation (AFC) times the member's years of service. Retirement defined benefits for Plan 3 are calculated using $1 \%$ of AFC times the member's years of service. AFC is the monthly average of the member's 60 consecutive highest-paid service credit months. TRS Plan $2 / 3$ has no cap on years of service credit.

Members are eligible for retirement with a full benefit at 65 with at least five years of service credit. Retirement before age 65 is considered an early retirement. TRS Plan $2 / 3$ members who have at least 20 years of service credit and are 55 years of age or older are eligible for early retirement with a reduced benefit. The benefit is reduced by a factor that varies according to age for each year before age 65. TRS Plan $2 / 3$ retirement benefits are actuarially reduced to reflect the choice of a survivor benefit.

Other TRS Plan 2/3 benefits include duty and nonduty

[^7]disability payments; a Cost-of-Living Adjustment (COLA) based on the Consumer Price Index, capped at 3\% annually; and a one-time, duty-related death benefit, if found eligible by the Washington State Department of Labor \& Industries.

Contributions: The TRS Plan $2 / 3$ member and employer contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2 and the defined benefit portion of Plan 3. The Plan $2 / 3$ employer rates include components to address the TRS Plan 1 unfunded actuarial accrued liability and an administrative expense that is currently set at $0.18 \%$.

The TRS Plan $2 / 3$ required contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

TRS Plan 2/3

| Actual Contribution Rates | Employer | Employee <br> Plan 2 | Employee <br> Plan 3 |
| :--- | ---: | ---: | ---: |
| State Agencies | $13.13 \%$ | $5.95 \%$ | $0 \%$ |
| Local Governmental Units | $13.13 \%$ | $5.95 \%$ | $0 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on

## Notes to the Financial Statements (cont.)

TRS Plan $2 / 3$ pension investments, net of pension plan investment expense, was $2.51 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers
The components of the net pension liability of TRS
Plan $2 / 3$ as of June 30,2016 , were as follows:

## TRS Plan 2/3

Dollars in Thousands

| Total Pension Liability | $\$$ | $12,172,222$ <br> $(10,798,925)$ |
| :--- | ---: | ---: |
| Plan Fiduciary Net Position |  | $\mathbf{1 , 3 7 3 , 2 9 7}$ |
| Participating Employers' Net Pension Liability | $\underline{\mathbf{\$}}$ | $88.72 \%$ |
| Plan Fiduciary Net Position as a Percentage of the |  |  |
| Total Pension Liability |  |  |

Actuarial Assumptions': The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| TRS Plan $\mathbf{2 / 3}$ |  |
| :--- | :--- |
| Inflation | $3.0 \%$ total economic inflation, $3.75 \%$ salary inflation |
| Salary | In addition to the base $3.75 \%$ salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a 7.50\% long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

## TRS Plan 2/3

| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| :--- | ---: | ---: |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

[^8]
## Notes to the Financial Statements (cont.)

The inflation component used to create the table on page 62 is $2.20 \%$ and represents the WSIB's most recent long-term estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

## Sensitivity of the Net Pension Liability to Changes in the

 Discount Rate: The table below presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower ( $6.50 \%$ ) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.```
TRS Plan 2/3
Dollars in Thousands
```

|  | 1\% Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate (7.50\%) | $\mathbf{1 \%}$ Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$ 3,107,958$ | $\$$ | $1,373,297$ | $\$(1,595,357)$ |  |
| Pension Liability |  |  |  |  |  |

## TRS Plan 3

As of June 30, 2016, 311 employers were participating in TRS Plan 3.

Plan Membership: As of June 30, 2016, TRS Plan 3 membership consisted of the following:

| TRS Plan 3 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 8,866 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 8,373 |
| Active Plan Members | $\underline{53,417}$ |
| Total Membership | $\underline{\mathbf{7 0 , 6 5 6}}$ |

Vesting: TRS Plan 3 members are immediately vested in the defined contribution portion of their plan.

Benefits Provided: TRS Plan 3 defined contribution benefits are totally dependent on employee contributions and investment earnings on those contributions.

Contributions: TRS Plan 3 members choose their contribution rate when joining membership and can change rates only when changing employers. As established by Chapter 41.34 RCW, the Plan 3 defined contribution rates are set at a minimum of $5 \%$ and a maximum of $15 \%$; members have six rate options to choose from. Employers do not contribute to the defined contribution benefits.

## Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF)

Administration: LEOFF was established in 1970, and its retirement benefit provisions are contained in Chapter 41.26 RCW. LEOFF membership includes all of the state's full-time, fully compensated, local law enforcement commissioned officers, fire fighters and, as of July 24, 2005, emergency medical technicians.

LEOFF is a cost-sharing, multiple-employer retirement system composed of two separate pension plans for both membership and accounting purposes. Both LEOFF plans are defined benefit plans.

## Notes to the Financial Statements (cont.)

## LEOFF Plan 1

As of June 30, 2016, 29 employers were participating in LEOFF Plan 1. The plan is closed to new entrants.

Plan Membership: As of June 30, 2016, LEOFF Plan 1 membership consisted of the following:

| LEOFF Plan 1 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 7,431 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 1 |
| Active Plan Members | 62 |
| Total Membership | $\underline{\mathbf{7 , 4 9 4}}$ |

Vesting: LEOFF Plan 1 members became vested after the completion of five years of eligible service.

Benefits Provided: LEOFF Plan 1 provides retirement, disability and death benefits. Retirement benefits are determined per year of service and are calculated as a percent of Final Average Salary (FAS) as follows:

| LEOFF Plan 1 |  |
| :--- | ---: |
| Years of Service | \% of FAS |
| $20+$ | $2 \%$ |
| $10-19$ | $1.5 \%$ |
| $5-9$ | $1.0 \%$ |

FAS is the basic monthly salary received at the time of retirement, provided a member has held the same position or rank for 12 months preceding the date of retirement. Otherwise, it is the average of the consecutive highest-paid 24 months' salary within the last 10 years of service. Members are eligible for retirement with five years of service at age 50 .

Other benefits include duty and nonduty disability payments, a Cost-of-Living Adjustment (COLA), and a one-time duty-related death benefit, if found eligible by the Washington State Department of Labor \& Industries.

## Contributions: LEOFF Plan 1 had no required employer

 or employee contributions for fiscal year 2016. Employers paid only the administrative expense of $0.18 \%$ of covered payroll.${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on LEOFF Plan 1 pension investments, net of pension plan investment expense, was $2.25 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of LEOFF Plan 1 employers as of June 30, 2016, were as follows:

LEOFF Plan 1
Dollars in Thousands

| Total Pension Liability | $\$$ | $4,340,582$ |
| :--- | ---: | ---: |
| Plan Fiduciary Net Position |  | $(5,370,868)$ |
| Participating Employers' Net Pension Liability | $\mathbf{\$}$ | $\mathbf{( 1 , 0 3 0 , 2 8 6 )}$ |
|  |  | $123.74 \%$ |
| Plan Fiduciary Net Position as a Percentage of the |  |  |

## Notes to the Financial Statements (cont.)

Actuarial Assumptions': The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

## LEOFF Plan 1

| Inflation | $3.0 \%$ total economic inflation, 3.75\% salary inflation |
| :--- | :--- |
| Salary | In addition to the base 3.75\% salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

LEOFF Plan 1

| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| :--- | ---: | ---: |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent longterm estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

[^9]
## Notes to the Financial Statements (cont.)

Contributions from plan members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate: The table below presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower ( $6.50 \%$ ) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.

LEOFF Plan 1
Dollars in Thousands

|  | 1\% Decrease <br> $(\mathbf{6 . 5 0 \%}$ | Current Discount <br> Rate (7.50\%) | 1\% Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$$ | $(612,032)$ | $\$$ | $(1,030,286)$ | $\$(1,387,800)$ |
| Pension Liability |  |  |  |  |  |

## LEOFF Plan 2

As of June 30, 2016, 369 employers were participating in LEOFF Plan 2.

Plan Membership: As of June 30, 2016, LEOFF Plan 2 membership consisted of the following:

| LEOFF Plan 2 |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 4,508 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 839 |
| Active Plan Members | $\underline{17,321}$ |
| Total Membership | $\underline{\mathbf{2 2 , 6 6 8}}$ |

Vesting: LEOFF Plan 2 members are vested after the completion of five years of eligible service.

Benefits Provided: LEOFF Plan 2 provides retirement, disability and death benefits. Retirement benefits are calculated using $2 \%$ of the member's Final Average Salary (FAS) times the member's years of service. FAS is the monthly average of the member's 60 consecutive highest-paid service credit months. Members are
eligible for retirement with a full benefit at 53 with at least five years of service credit. Members who retire before age 53 receive reduced benefits. If the member has at least 20 years of service and is age 50 to 52 , the reduction is $3 \%$ for each year before age 53 . Otherwise, the benefits are actuarially reduced for each year before age 53. LEOFF Plan 2 retirement benefits are actuarially reduced to reflect the choice of a survivor benefit.

Other LEOFF Plan 2 benefits include duty and nonduty disability payments; a Cost-of-Living Allowance based on the Consumer Price Index, capped at $3 \%$ annually; and a one-time, duty-related death benefit, if found eligible by the Washington State Department of Labor \& Industries.

Contributions: The LEOFF Plan 2 employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund Plan 2. The employer rate includes an administrative expense component set at $0.18 \%$.

The LEOFF Plan 2 required contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

| LEOFF Plan 2 |  |  |
| :--- | ---: | ---: |
| Actual Contribution Rates | Employer | Employee |
| Local Governmental Units | $5.23 \%$ | $8.41 \%$ |
| Ports and Universities | $8.59 \%$ | $8.41 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds'

## Notes to the Financial Statements (cont.)

investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on LEOFF Plan 2 pension investments, net of pension plan investment expense, was $2.48 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

## Net Pension Liability of Participating Employers

 The components of the net pension liability of the participating LEOFF Plan 2 employers as of June 30, 2016, were as follows:
## LEOFF Plan 2 <br> Dollars in Thousands

| Total Pension Liability | \$ | 9,628,990 |
| :---: | :---: | :---: |
| Plan Fiduciary Net Position |  | (10,210,620) |
| Participating Employers' Net Pension Liability | \$ | $(581,630)$ |
| Plan Fiduciary Net Position as a Percentage of the |  | 106.04\% | Total Pension Liability

Actuarial Assumptions ${ }^{2}$ : The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| LEOFF Plan $\mathbf{2}$ |  |
| :--- | :--- |
| Inflation | $3.0 \%$ total economic inflation, $3.75 \%$ salary inflation |
| Salary | In addition to the base $3.75 \%$ salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100\% Scale BB. Mortality rates are
applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30,2015 , valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each

[^10]
## Notes to the Financial Statements (cont.)

major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

| LEOFF Plan 2 |  |  |
| :--- | ---: | ---: |
| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent longterm estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.50 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

## Sensitivity of the Net Pension Liability to Changes in the

 Discount Rate: The table below presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower ( $6.50 \%$ ) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.LEOFF Plan 2
Dollars in Thousands

|  | 1\% Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate (7.50\%) | $\mathbf{1 \%}$ Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$$ | $1,631,051$ | $\$$ | $(581,630)$ | $\$(2,249,349)$ |
| Pension Liability |  |  |  |  |  |

## Washington State Patrol Retirement System (WSPRS)

Administration: WSPRS was established by the Legislature in 1947, and its retirement benefit provisions are contained in Chapter 43.43 RCW. WSPRS is a single-employer retirement system composed of two separate pension plans, and membership includes only commissioned employees of the Washington State Patrol.

WSPRS Plan 1 and WSPRS Plan 2 are defined benefit plans. The plans are reported together for financial reporting and investment purposes in the same pension fund. All assets of this combined Plan 1/2 may legally be used to pay the defined benefits of any WSPRS members or beneficiaries, as the terms of the plans define.

WSPRS Plan 1/2
As of June 30, 2016, one employer was participating in WSPRS.

Plan Membership: As of June 30, 2016, membership consisted of the following:

| WSPRS Plan 1/2 |  |  |
| :--- | ---: | ---: |
|  | Plan 1 | Plan 2 |
| Inactive Plan Members or Beneficiaries Currently <br> Receiving Benefits | 1,078 | 0 |
| Inactive Plan Members Entitled to But Not Yet Receiving <br> Benefits | 76 | 28 |
| Active Plan Members | $\boxed{498}$ | 470 |
| Total Membership | $\underline{\mathbf{1 , 6 5 2}}$ | $\mathbf{4 9 8}$ |

Vesting: Active WSPRS Plan 1 and Plan 2 members do not have to meet a vesting requirement. Inactive WSPRS members are vested after the completion of five years of eligible service.

Plan 1 is closed to new entrants. All new WSPRS members are enrolled in Plan 2.

## Notes to the Financial Statements (cont.)

Benefits Provided: WSPRS Plans 1 and 2 provide retirement, disability and death benefits. Retirement benefits are calculated using $2 \%$ of the member's Average Final Salary (AFS) times the member's years of service, capped at $75 \%$. For Plan 1 members, AFS is based on the average of the member's 24 consecutive highest-paid service credit months. For Plan 2 members, AFS is based on the average of the member's 60 consecutive highest-paid service credit months.

Active members are eligible for retirement at age 55 with no minimum required service credit or at any age with 25 years of service credit. Members must retire no later than the first of the month following the month they reach age 65, unless the member is chief of the Washington State Patrol. WSPRS retirement benefits are actuarially reduced to reflect the choice of a survivor benefit.

Other benefits include a Cost-of-Living Adjustment (COLA), death benefits and a one-time, duty-related death benefit, if found eligible by the Washington State Department of Labor \& Industries.

Contributions: The WSPRS Plans 1 and 2 employer and employee contribution rates are developed by the Office of the State Actuary (OSA) to fully fund WSPRS. The employer rate includes an administrative expense component currently set a $0.18 \%$.

The WSPRS required contribution rates (expressed as a percentage of covered payroll) at the close of fiscal year 2016 were as follows:

| WSPRS Plan 1/2 |  |  |
| :--- | ---: | ---: |
| Actual Contribution Rates | Employer | Employee |
| State Agencies | $8.34 \%$ | $6.84 \%$ |

## Investments

Investment Policy: The WSIB has been authorized by statute as having investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of WSIB-adopted investment policies for the various asset classes.

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on WSPRS Plan $1 / 2$ pension investments, net of pension plan investment expense, was $2.34 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of WSPRS Plan $1 / 2$ as of June 30, 2016, were as follows:

| WSPRS Plan l/2 |  |  |
| :--- | ---: | ---: |
| Dollars in Thousands |  |  |
| Total Pension Liability | $\$$ | $1,167,443$ |
| Plan Fiduciary Net Position | $(1,098,127)$ |  |
| Participating Employers' Net Pension Liability | $\mathbf{\$}$ | $\mathbf{6 9 , 3 1 6}$ |
| Plan Fiduciary Net Position as a Percentage of the |  | $94.06 \%$ | Total Pension Liability

Actuarial Assumptions ${ }^{2}$ : The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| WSPRS Plan $\mathbf{1 / 2}$ |  |
| :--- | :--- |
| Inflation | $3.0 \%$ total economic inflation, $3.75 \%$ salary inflation |
| Salary | In addition to the base 3.75\% salary inflation assumption, |
| Increases | salaries are also expected to grow by promotions and longevity. |
| Investment | $7.50 \%$ |
| Rate of Return |  |

[^11]
## Notes to the Financial Statements (cont.)

Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which the WSIB develops a best estimate of expected future rates of return (expected returns net of pension plan investment expense but including inflation) for each major asset class. Those expected returns make up one component of the WSIB's Capital Market Assumptions (CMAs).

The CMAs contain three pieces of information for each class of assets the WSIB currently invests in:

- Expected annual return
- Standard deviation of the annual return
- Correlations between the annual returns of each asset class with every other asset class

The WSIB uses the CMAs and their target asset allocation to simulate future investment returns over various time horizons.

The Office of the State Actuary (OSA) selected a $7.50 \%$ long-term expected rate of return on pension plan investments. In selecting this assumption, OSA reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered CMAs and simulated expected investment returns the WSIB provided. See the 2015 Report on Financial Condition and Economic Experience Study on the OSA website for additional information on how this assumption was selected.

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30, 2016, are summarized in the following table:

WSPRS Plan $1 / 2$

| Asset Class | Target Allocation | Long-Term Expected <br> Real Rate of Return |
| :--- | ---: | ---: |
| Fixed Income | $20.00 \%$ | $1.70 \%$ |
| Tangible Assets | $5.00 \%$ | $4.40 \%$ |
| Real Estate | $15.00 \%$ | $5.80 \%$ |
| Global Equity | $37.00 \%$ | $6.60 \%$ |
| Private Equity | $23.00 \%$ | $9.60 \%$ |

The inflation component used to create the table above is $2.20 \%$ and represents the WSIB's most recent longterm estimate of broad economic inflation.

Discount Rate: The discount rate used to measure the total pension liability was $7.50 \%$. To determine the discount rate, an asset sufficiency test was completed to test whether the pension plan's fiduciary net position was sufficient to make all projected future benefit payments of current plan members. Consistent with current law, the completed asset sufficiency test included an assumed $7.70 \%$ long-term discount rate to determine funding liabilities for calculating future contribution rate requirements. Consistent with the long-term expected rate of return, a $7.50 \%$ future investment rate of return on invested assets was assumed for the test.

Contributions from plan members and employers are assumed to continue to be made at contractually required rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of $7.50 \%$ on pension plan investments was applied to determine the total pension liability.

## Sensitivity of the Net Pension Liability to Changes in the

 Discount Rate: The table at the top of page 71 presents the net pension liability of the employers calculated using the discount rate of $7.50 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage
## Notes to the Financial Statements (cont.)

point lower (6.50\%) or 1 percentage point higher ( $8.50 \%$ ) than the current rate.

```
WSPRS Plan 1/2
Dollars in Thousands
```

|  | 1\% Decrease <br> $\mathbf{( 6 . 5 0 \% )}$ | Current Discount <br> Rate <br>  <br>  <br> $\mathbf{( 7 . 5 0 \%}$ | 1\% Increase <br> $\mathbf{( 8 . 5 0 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$$ | 260,659 | $\$$ | 69,316 | $\$$ |
| Pension Liability |  |  |  |  | $(81,250)$ |

## Judicial Retirement System (JRS)

Administration: JRS was established by the Legislature in 1971, and its retirement benefit provisions are contained in Chapter 2.10 RCW. JRS is a singleemployer retirement system, and membership includes judges elected or appointed to the Supreme Court, Court of Appeals and superior courts on or after August 9, 1971.

JRS is composed of and reported as one plan for accounting purposes. JRS is closed to new entrants.

Plan Membership: As of June 30, 2016, JRS membership consisted of the following:

| JRS |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 103 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 0 |
| Active Plan Members | 0 |
| Total Membership | $\mathbf{1 0 3}$ |

Vesting: JRS members became vested after the completion of 15 years of eligible service or 12 years if the member left office involuntarily.

Benefits Provided: JRS provides retirement, disability and death benefits. Retirement benefits are calculated using $3.5 \%$ of the member's Final Average Salary (FAS) for members with 15 years of eligible service and $3 \%$ of FAS for members with 10 to 14 years of eligible service.

JRS members are eligible for retirement at age 60 with 15 years of service or with 12 years of service (if the member left office involuntarily and at least 15 years have passed from the beginning of judicial service).

Contributions: JRS had no active plan members during fiscal year 2016; therefore, no employer and employee contributions were required. JRS retirement benefits are financed on a pay-as-you-go basis from a combination of investment earnings and funding from the state.

## Investments

The Office of the State Treasurer (OST) manages all pension assets for JRS.

Investment Policy: The overall objective of the OST investment policy is to construct an investment portfolio that is optimal, or efficient. An optimal, or efficient, porifolio is one that provides the greatest expected return for a given expected level of risk, or the lowest expected risk for a given expected return.

Eligible investments are only those securities and deposits authorized by statute (Chapters 39.58, 39.59, 43.250 and 43.84 .080 RCW) and include:

- Obligations of the U.S. government
- Obligations of U.S. government agencies or corporations wholly owned by the U.S. government
- Obligations of government-sponsored enterprises that are or might become eligible as collateral for advances to member banks as determined by the board of governors of the Federal Reserve
- Banker's acceptances purchased on the secondary market rated with the highest short-term credit rating of any two Nationally Recognized Statistical Rating Organizations (NRSROs) at the time of purchase (if the banker's acceptance is rated by more than two NRSROs, it must have the highest rating from all the organizations)
- Commercial paper, as long as the OST adheres to policies and procedures of the WSIB regarding commercial paper [RCW 43.84.080(7)]
- Certificates of deposit with financial institutions the Washington Public Deposit Protection Commission has qualified
- The Local Government Investment Pool
- Obligations of Washington state or its political subdivisions


## Notes to the Financial Statements (cont.)

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on JRS pension investments, net of pension plan investment expense, was $0.62 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of JRS as of June 30, 2016, were as follows:

## JRS

Dollars in Thousands

| Total Pension Liability | $\$$ | 104,642 |
| :--- | :---: | ---: |
| Plan Fiduciary Net Position |  | $(6,775)$ |
| Participating Employers' Net Pension Liability | $\mathbf{\$}$ | $\mathbf{9 7 , 8 6 7}$ |
| Plan Fiduciary Net Position as a Percentage of the |  | $6.47 \%$ |

Total Pension Liability
Actuarial Assumptions ${ }^{2}$ : The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| JRS |  |
| :--- | :--- |
| Inflation | $3.0 \%$ total economic inflation |
| Salary Increases | None; only inactive participants |
| Investment | $4.00 \%$ |
| Rate of Return |  |

For JRS, mortality rates were set equal to those used for PERS. Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB.

Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30,2015 , valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

Discount Rate: Contributions are made to JRS to ensure cash is available to make benefit payments. Since this plan is operated on a pay-as-you-go basis, the discount rate used to measure the total pension liability was set equal to the Bond Buyer General Obligation 20-Bond Municipal Bond Index, or $2.85 \%$ for the June 30, 2016, measurement date.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate: The following presents the net pension liability of the employers calculated using the discount rate of $2.85 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (1.85\%) or 1 percentage point higher ( $3.85 \%$ ) than the current rate.

## JRS

Dollars in Thousands

|  | 1\% Decrease <br> $\mathbf{( 1 . 8 5 \% )}$ | Current Discount <br> Rate (2.85\%) | 1\% Increase <br> $\mathbf{( 3 . 8 5 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net | $\$$ | 108,084 | $\$$ | 97,867 | $\$$ |
| Pension Liability |  |  |  |  | 89,146 |

## Judges' Retirement Fund (JRF)

Administration: The Judges' Retirement Fund (JRF) was established in 1937, and its retirement benefit provisions are contained in Chapter 2.12 RCW. JRF is a single-employer retirement system composed of a single defined benefit plan. Members include judges of the Supreme Court, Court of Appeals and superior courts of Washington state. JRF has been closed to new entrants since 1971.

[^12]
## Notes to the Financial Statements (cont.)

JRF is composed of and reported as one plan for accounting purposes.

Plan Membership: As of June 30, 2016, JRF membership consisted of the following:

| JRF |  |
| :--- | ---: |
| Inactive Plan Members or Beneficiaries Currently Receiving Benefits | 12 |
| Inactive Plan Members Entitled to But Not Yet Receiving Benefits | 0 |
| Active Plan Members | 0 |
| Total Membership | $\mathbf{1 2}$ |

Vesting: JRF members became vested after the completion of 18 years of eligible service at any age or 10 years of eligible service at age 70 .

Benefits Provided: JRF provides disability and retirement benefits.

Contributions: No active plan members were in JRF during fiscal year 2016; therefore, no employer and employee contributions were required. JRF retirement benefits are financed on a pay-as-you-go basis from a combination of investment earnings and funding from the state.

## Investments

OST manages all pension assets for JRF.
Investment Policy: The overall objective of the OST investment policy is to construct an investment portfolio that is optimal, or efficient. An optimal, or efficient, porffolio is one that provides the greatest expected return for a given expected level of risk, or the lowest expected risk for a given expected return.

Eligible investments are only those securities and deposits authorized by statute (Chapters 39.58, 39.59, 43.250 and 43.84.080 RCW) and include:

- Obligations of the U.S. government
- Obligations of U.S. government agencies or corporations wholly owned by the U.S. government
- Obligations of government-sponsored enterprises that are or might become eligible as collateral
for advances to member banks as determined by the board of governors of the Federal Reserve
- Banker's acceptances purchased on the secondary market rated with the highest short-term credit rating of any two Nationally Recognized Statistical Rating Organizations (NRSROs) at the time of purchase (if the banker's acceptance is rated by more than two NRSROs, it must have the highest rating from all the organizations)
- Commercial paper, as long as the OST adheres to policies and procedures of the WSIB regarding commercial paper [RCW 43.84.080(7)]
- Certificates of deposit with financial institutions the Washington Public Deposit Protection Commission has qualified
- The Local Government Investment Pool
- Obligations of Washington state or its political subdivisions

General information about the retirement funds' investments, valuation, classifications, concentrations and maturities can be found in "Note 1: Summary of Significant Accounting Policies and Plan Asset Matters."

Rate of Return': For the fiscal year ended June 30, 2016, the annual money-weighted rate of return on JRF pension investments, net of pension plan investment expense, was $0.62 \%$. This money-weighted rate of return expresses investment performance, net of pension plan investment expense, and reflects both the size and timing of cash flows.

Net Pension Liability of Participating Employers The components of the net pension liability of JRF as of June 30,2016 , were as follows:

| JRF |  |
| :--- | ---: |
| Dollars in Thousands |  |
| Total Pension Liability | 3,097 |
| Plan Fiduciary Net Position | $(582)$ |
| Participating Employers' Net Pension Liability | $\mathbf{2 , 5 1 5}$ |
| Plan Fiduciary Net Position as a Percentage of the | $18.79 \%$ |
| Total Pension Liability |  |

[^13]
## Notes to the Financial Statements (cont.)

Actuarial Assumptions': The total pension liability was determined by an actuarial valuation as of June 30, 2015, with the results rolled forward to June 30, 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

| JRF |  |
| :--- | :--- |
| Inflation | $3.0 \%$ total economic inflation |
| Salary Increases | None; only inactive participants |
| Investment | $4.00 \%$ |
| Rate of Return |  |

For JRF, mortality rates were set equal to those used for PERS. Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, which the Society of Actuaries published. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using $100 \%$ Scale BB. Mortality rates are applied on a generational basis, meaning members are assumed to receive additional mortality improvements in each future year throughout their lifetimes.

The actuarial assumptions used in the June 30, 2015, valuation were based on the results of the 2007-2012 Experience Study Report. Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

Discount Rate: Contributions are made to JRF to ensure cash is available to make benefit payments. Since this plan is operated on a pay-as-you-go basis, the discount rate used to measure the total pension liability was set equal to the Bond Buyer General Obligation 20-Bond Municipal Bond Index, or $3.80 \%$ for the June 30, 2015, measurement date.

## Sensitivity of the Net Pension Liability to Changes in

 the Discount Rate: The following table presents the net pension liability of the employers calculated using the discount rate of $2.85 \%$ as well as what the employers' net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower(1.85\%) or 1 percentage point higher ( $3.85 \%$ ) than the current rate.

JRF
Dollars in Thousands

|  | 1\% Decrease <br> $\mathbf{( 1 . 8 5 \% )}$ | Current Discount <br> Rate (2.85\%) | 1\% Increase <br> $\mathbf{( 3 . 8 5 \% )}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Employers' Net <br> Pension Liability | $\$$ | 2,650 | $\$$ | 2,515 | $\$$ |
| 2,390 |  |  |  |  |  |

## Notes to the Financial Statements (cont.)

## Recent Legislation Affecting Pension Systems/Plans

DRS-Administered During Fiscal Year 2016
Arranged Chronologically by Effective Date - Page 1 of 2

| Legal Reference | Effective Date | Systems/Plans Affected | Description |
| :---: | :---: | :---: | :---: |
| Chapter 3, Laws of 2012 (ESSB 6239) | 6/7/12 | All systems and plans | This law allows same-gender couples to marry and automatically converts certain domestic partnerships into marriages unless the couple marries or dissolves the partnership before June 30, 2014. Under the provisions of this law, survivor benefits could be available sooner to certain members of the state's retirement systems. |
| Chapter 72, Laws of 2012 (ESB 5159) | 6/7/12 | WSPRS | Current WSPRS members who have service credit earned as commercial vehicle enforcement officers within PERS 2 may transfer said credit into WSPRS. The member must pay the full actuarial cost of the transfer. |
| Chapter 236, Laws of 2012 (EHB 2771) | 6/7/12 | LEOFF, PERS, PSERS, SERS and TRS | This law amends the retirement statutes to clarify that governmental contractors are not employers under the system, unless otherwise qualifying, and that the determination of whether an employee/employer relationship has been established shall be based solely on the relationship between the contracted employee and the governmental employer. |
| Chapter 248, Laws of 2012 (SB 6134) | 6/7/12 | LEOFF 2 | The initial timeline to transfer service credit under RCW 41.26 .435 was moved from June 30, 2014, to June 30, 2012. |
| Chapter 22, Laws of 2013 (SB 5046) | 7/28/13 | PERS | The mandatory retirement criteria for district court judges was changed to require retirement after the end of the term of office in which they turn age 75, instead of at the end of the calendar year in which they turn age 75. |
| Chapter 287, Laws of 2013 (SHB 1868) | 7/28/13 | LEOFF 2 | This law allows catastrophically disabled LEOFF 2 members to be reimbursed for premiums of medical insurance other than those the employer, COBRA, or Medicare A and/or B provide. The reimbursement is limited to payments made after June 30, 2013, that do not exceed the premium reimbursement amounts COBRA authorized. |
| Chapter 95, Laws of 2014 (SB 6321) | 6/12/14 | PERS 3, SERS 3 and TRS 3 | This law removes annual rate flexibility in Plans 3. A TRS 3 member no longer has the option to change contribution rates each year during the month of January. This bill amends RCW 41.34.040, removing the annual change option, and became effective after January 2015. Even though this statutory option applies to PERS 3 and SERS 3 members as well, it has never been implemented in those plans. This modification is deemed necessary by the Internal Revenue Service to ensure Plans 3 retain favorable tax qualification. |
| Chapter 145, Laws of 2014 (HB 2456) | 6/12/14 | LEOFF | This law eliminates the expiration date on the statutory provision in the LEOFF definition of fire fighter that includes emergency medical technicians (EMTs). This correction allows EMTs continued eligibility for membership in LEOFF. |
| Chapter 91, Laws of 2014 (SB 6201) | 6/12/14 | LEOFF 2 | This law allows LEOFF 2 members to use funds from certain tax-qualified plans to purchase life annuities from the LEOFF 2 trust fund at the time of retirement. |
| Chapter 172, <br> Laws of 2014 <br> (SB 6328) | 6/12/14 | Deferred Compensation Program | This law allows the state and other local government authorizing entities the option to allow employees participating in the employer-sponsored Deferred Compensation Program to purchase individual securities within the plan investment options. It does not require plans to make this option available; it only allows it. |
| Chapter 75, Laws of 2015 (HB 1168) | 7/24/15 | PERS 2 and 3 | ESHB 1981 of the 2011 session modified the return-to-work rules for PERS retirees. This law corrects some unintended consequences of those statute changes to ensure: <br> - PERS retirees who return to work in ineligible positions would not be subject to the 867-hour limitation <br> - PERS 2 and 3 retirees who return to work in eligible positions covered by other DRS-administered systems would be eligible to work up to 867 hours before their benefits are suspended |
| Chapter 111, Laws of 2015 (SB 5210) | 7/24/15 | WSPRS | This law allows WSPRS members to use funds from certain tax-qualified plans to purchase life annuities from the WSPRS trust fund at the time of retirement. |

## Notes to the Financial Statements (cont.)

## Recent Legislation Affecting Pension Systems/Plans

DRS-Administered During Fiscal Year 2016
Arranged Chronologically by Effective Date - Page 2 of 2

| Legal Reference | Effective Date | Systems/Plans Affected | Description |
| :---: | :---: | :---: | :---: |
| Chapter 78, Laws of 2015 (HB 1194) | 7/24/15 | LEOFF 2 and WSPRS | A surviving spouse of a LEOFF 2 or WSPRS member who is killed in the line of duty is entitled to receive a monthly benefit of at least 60\% of the member's wages from the state workers' compensation program. However, this benefit was terminated if the survivor remarries. This legislation allows the surviving spouse of a LEOFF 2 or WSPRS member killed in the course of employment to remarry and continue receiving a workers' compensation survivor benefit. |
| Chapter 241, Laws of 2016 (SB 6194) | 4/3/16 | TRS | This law allows charter school employees to be members of the state retirement systems as long as DRS receives determination from the IRS that the inclusion of those employees won't jeopardize the status of the systems as government plans. |
| Chapter 112, <br> Laws of 2016 <br> (SB 5435) | 6/9/16 | All systems and plans | This law provides for the automatic enrollment of new state employees in the Washington State Deferred Compensation Program (DCP) with a default contribution rate of $3 \%$. Employees will have the opportunity to opt out or set their own contribution rates. The law also gives DRS the option to offer a 401 (a) money-purchase retirement savings plan. |
| Chapter 211, <br> Laws of 2016 <br> (SB 6091) | 6/9/16 | All systems and plans | This law clarifies the definition of "slayer" to include people found not guilty by reason of insanity. A slayer isn't entitled to receive a retirement benefit from the person he or she killed. |
| Chapter 236, Laws of 2016 (SB 6523) | 6/9/16 | PERS | This law allows an employee providing emergency medical services to a consortium of local governments in Snohomish County to choose to establish service credit in PERS for service performed before July 23, 2003. The employee must pay both the employer and employee contributions, as DRS calculates, within five years of choosing to establish service credit. |
| Chapter 233, Laws of 2016 (SB 6455) | 6/9/16 | TRS 2 and 3 | This law allows TRS members who retired using the 2008 Early Retirement Factors (ERFs) to return to work as substitute teachers for up to 867 hours without suspending their benefits. This provision is in effect from June 9, 2016, through July 31, 2020. |
| Chapter 120, Laws of 2016 (SB 5873) | 6/9/16 | LEOFF 1 | This law gives a LEOFF Plan 1 retiree a chance to name as survivor a spouse he or she married after retiring. To qualify, the marriage needs to have spanned at least two years before Sept. 1, 2015. |
| Chapter 115, Laws of 2016 (SB 6263) | 6/9/16 | LEOFF 2 | This law impacts LEOFF Plan 2 members who are called into eligible federal service to respond to natural disasters or other federal emergencies. It provides them with benefit protections similar to the ones provided to members of the National Guard or military reserves who are called during a time of war. |
| Chapter 222, Laws of 2016 (SB 6264) | 6/9/16 | LEOFF and WSPRS | This law allows retirees of LEOFF and WSPRS a six-month window to purchase annuities. The annuities may be purchased between January 1 and June 1, 2017. |

## Notes to the Financial Statements (cont.)

## C. Funding Policy

All employers are required to contribute at the level the Legislature established. Plan-specific tables presented in Note 2 Section B provide the required contribution rates for each plan at the close of fiscal year 2016.

PERS: Each biennium, the state Pension Funding Council adopts Plan 1 employer contribution rates, Plan 2 employer and employee contribution rates, and Plan 3 employer contribution rates, subject to revision by the Legislature. Employee contribution rates for Plan 1 are established by statute at 6\%. The employer and employee contribution rates for Plan 2 and the employer contribution rate for Plan 3 are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. Under PERS Plan 3 , employer contributions finance the defined benefit portion of the plan, and member contributions finance the defined contribution portion. The Plan 3 employee contribution rates range between $5 \%$ and $15 \%$.

The methods used to determine PERS contribution requirements are established under state statute in accordance with Chapters 41.40 and 41.45 RCW.

SERS: Each biennium, the state Pension Funding Council adopts Plan 2 employer and employee contribution rates and Plan 3 employer contribution rates, subject to revision by the Legislature. The employer and employee contribution rates for Plan 2 and the employer contribution rate for Plan 3 are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. Under SERS Plan 3, employer contributions finance the defined benefit portion of the plan, and member contributions finance the defined contribution portion. The Plan 3 employee contribution rates range between $5 \%$ and $15 \%$.

The methods used to determine SERS contribution requirements are established under state statute in accordance with Chapters 41.35 and 41.45 RCW.

PSERS: Each biennium, the state Pension Funding Council adopts Plan 2 employer and employee contribution rates, subject to revision by the Legislature. The employer and employee contribution rates for Plan 2 are developed by the Office of the State Actuary to fully fund Plan 2.

The methods used to determine PSERS contribution requirements are established under state statute in accordance with Chapters 41.37 and 41.45 RCW.

TRS: Each biennium, the state Pension Funding Council adopts Plan 1 employer contribution rates, Plan 2 employer and employee contribution rates, and Plan 3 employer contribution rates, subject to revision by the Legislature. Employee contribution rates for Plan 1 are established by statute at $6 \%$. The employer and employee contribution rates for Plan 2 and the employer contribution rate for Plan 3 are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. Under TRS Plan 3 , employer contributions finance the defined benefit portion of the plan and member contributions finance the defined contribution portion. The Plan 3 employee contribution rates range between $5 \%$ and $15 \%$.

The methods used to determine the TRS contribution requirements are established under state statute in accordance with Chapters 41.32 and 41.45 RCW.

LEOFF: Employer and employee contribution rates are developed by the Office of the State Actuary to fully fund the plans. Since July 1, 2000, Plan 1 employers and employees contribute $0 \%$, as long as the plan remains fully funded. Plan 2 employers and employees pay at the level the LEOFF Plan 2 Retirement Board adopts.

The Legislature, by means of a special funding arrangement, appropriates money from the state General Fund to supplement the current service liability and fund the prior service costs of Plan 2 in accordance with the recommendations of the Pension Funding Council and the LEOFF Plan 2 Retirement Board.

This special funding situation is not mandated by the state constitution and could be changed by statute. For fiscal year 2016, the state contributed $\$ 60.4$ million to LEOFF Plan 2.

The methods used to determine the contribution requirements are established under state statute in accordance with Chapters 41.26 and 41.45 RCW.

## Notes to the Financial Statements (cont.)

WSPRS: Each biennium, the state Pension Funding Council adopts the employee and the state contribution rates, subject to revision by the Legislature. The employee and the state contribution rates are developed by the Office of the State Actuary to fully fund the plan.

The methods used to determine the contribution requirements are established under state statute in accordance with Chapters 43.43 and 41.45 RCW.

JRS: No active members are in the Judicial Retirement System. The state guarantees the solvency of JRS on a pay-as-you-go basis. Each biennium, the Legislature, through appropriations from the state General Fund, contributes amounts sufficient to meet benefit payment requirements. For fiscal year 2016, the state contributed $\$ 9.5$ million.

JRF: No active members are in the Judges' Retirement Fund. The state guarantees the solvency of JRF on a pay-as-you-go basis. Each biennium, the Legislature, through appropriations from the state General Fund, contributes amounts sufficient to meet benefit payment requirements. For fiscal year 2016, the state contributed $\$ 0.5$ million.

## D. Judicial Retirement Account

The Judicial Retirement Account (JRA) was established by the Legislature in 1988 to provide supplemental retirement benefits. It is a defined contribution plan the state of Washington Administrative Office of the Courts (AOC) administers under the direction of the Board for Judicial Administration. Membership includes judges elected or appointed to the Supreme Court, Court of Appeals and superior courts who are members of PERS. Vesting is full and immediate.

Since January 1, 2007, any newly elected or appointed Supreme Court justice, Court of Appeals judge or superior court judge may no longer participate in JRA. As of June 30, 2016, five active members and 135 inactive members were in JRA. The state, through the AOC, is the sole participating employer in JRA.

JRA plan members are required to contribute $2.5 \%$ of
covered salary. The state, as employer, contributes an equal amount on a monthly basis. The employer and employee obligations to contribute are established in Chapter 2.14 RCW. Plan provisions and contribution requirements are established in state statute, and only the state Legislature can amend them.

A JRA member who separates from judicial service for any reason is entitled to receive a lump sum distribution of the accumulated contributions. The administrator of JRA may adopt rules establishing other payment options. If a member dies, the amount of accumulated contributions standing to the member's credit at the time of the member's death is to be paid to the member's estate or such person or persons, trust, or organization as the member has nominated by written designation.

The administrator of JRA has entered into an agreement for services with DRS and with the Washington State Investment Board (WSIB). Under this agreement, DRS is responsible for all record keeping, accounting and reporting of member accounts and WSIB is granted the full power to establish investment policy, develop participant investment options and manage the investment funds for the JRA plan, consistent with the provisions of RCW 2.14.080 and 43.84.150.

## E. Deferred Compensation Program

 The Deferred Compensation Program (DCP) is established pursuant to RCW 41.50.770 and in accordance with Internal Revenue Code Section 457. Employees of the state of Washington and its political subdivisions that choose to join have the option of participating in the program. The deferred compensation is not available to employees until termination, retirement, disability, death or unforeseeable financial emergency. DRS administers the state Deferred Compensation Program.The intent of the program is to provide additional income to participants upon retirement. By deferring part of their income, participants can reduce their taxable income each year. The investments remain tax-free until they are withdrawn. The program provides participants with a means to easily save money and help supplement their other retirement income.

## Notes to the Financial Statements (cont.)

Employees participating in DCP self-direct their investments through options the WSIB provides. The WSIB has the full power to invest monies in DCP in accordance with RCW 43.84.150, 43.33A. 140 and 41.50.770.

The program offers two investment options: the One-Step Investing option and the Build and Monitor option.

The One-Step Investing option is designed for those who do not have the desire, comfort level and/or time to select, monitor and rebalance, as needed, their own allocation mix of funds. Each Retirement Strategy Fund is diversified and automatically rebalances, adjusting the participant's allocation mix as the participant moves toward a retirement date and continuing for 15 years beyond the person's target date.

The funds in this option include:

- Retirement Maturity Strategy
- 2005 Retirement Strategy
- 2010 Retirement Strategy
- 2015 Retirement Strategy
- 2020 Retirement Strategy
- 2025 Retirement Strategy
- 2030 Retirement Strategy
- 2035 Retirement Strategy
- 2040 Retirement Strategy
- 2045 Retirement Strategy
- 2050 Retirement Strategy
- 2055 Retirement Strategy
- 2060 Retirement Strategy

The Build and Monitor option requires the participant to:

- Select fund(s) from any or all of the following funds:
» Emerging Market Equity Index Fund
» Global Equity Index Fund
" Savings Pool
" Socially Responsible Balanced Fund
» U.S. Large Cap Equity Index Fund
» U.S. Small Cap Value Equity Index Fund
" Washington State Bond Fund
- Monitor account activity
- Rebalance the allocation mix as necessary to maintain desired investment objectives

DCP participants may adjust or suspend their participation in the program at any time. Upon separation from employment, DCP participants have the option of withdrawing some or all of the balance in their accounts or leaving their balances in place to continue to benefit from market fluctuations.

The IRS requires a DCP participant to start receiving mandatory account distributions at retirement or by April of the year after the participant turns $701 / 2$ years old, whichever comes later.

All amounts of compensation deferred through the program, all property and rights purchased with those amounts, and all income attributable to those amounts are held in trust by the WSIB, as set forth under RCW 43.33A.030, for the exclusive benefit of DCP participants and their beneficiaries. Neither a participant nor the participant's beneficiary or beneficiaries, nor any other designee, has any right to commute, sell, assign, transfer or otherwise convey the right to receive any payments from the program. These payments and rights are nonassignable and nontransferable.
® Required Supplementary Information: Schedule of Changes in Net Pension Liability

| PERS Plan 1 <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 28,936 | \$ | 28,685 | \$ | 37,503 |
| Interest |  | 914,606 |  | 933,977 |  | 945,296 |
| Changes of Benefit Terms |  | - |  | - |  | - |
| Differences Between Expected and Actual Experience |  | 3,713 |  | 27,130 |  | - |
| Changes in Assumptions |  | $(36,416)$ |  | 23,339 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(1,203,209)$ |  | $(1,202,994)$ |  | (1,193,715) |
| Net Change in Total Pension Liability |  | $(292,370)$ |  | $(189,862)$ |  | $(210,915)$ |
| Total Pension Liability - Beginning |  | 12,789,242 |  | 12,979,104 |  | 13,190,019 |
| Total Pension Liability - Ending (a) | \$ | 12,496,872 | \$ | 12,789,242 | \$ | 12,979,104 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | 595,982 |  | 462,100 |  | 448,895 |
| Contributions - Member |  | 18,457 |  | 21,617 |  | 28,087 |
| Net Investment Income |  | 157,070 |  | 336,310 |  | 1,311,995 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(1,203,209)$ |  | $(1,202,994)$ |  | (1,193,715) |
| Administrative Expense |  | (301) |  | (269) |  | (506) |
| Other |  | 90 |  | (9) |  | 36 |
| Net Change in Plan Fiduciary Net Position |  | $(431,911)$ |  | $(383,245)$ |  | 594,792 |
| Plan Fiduciary Net Position - Beginning |  | 7,558,312 |  | 7,941,557 |  | 7,346,765 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 7,126,401 | \$ | 7,558,312 | \$ | 7,941,557 |
| Plan's Net Pension Liability (Asset) <br> — Ending (a) - (b) | \$ | 5,370,471 | \$ | 5,230,930 | \$ | 5,037,547 |


| PERS Plan 2/3 <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 893,404 | \$ | 864,319 | \$ | 934,401 |
| Interest |  | 2,506,824 |  | 2,302,453 |  | 2,057,556 |
| Changes of Benefit Terms |  | - |  | - |  | - |
| Differences Between Expected and Actual Experience |  | $(218,153)$ |  | 491,528 |  | - |
| Changes in Assumptions |  | 62,968 |  | 7,450 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(812,514)$ |  | $(700,905)$ |  | $(600,862)$ |
| Net Change in Total Pension Liability |  | 2,432,529 |  | 2,964,846 |  | 2,391,094 |
| Total Pension Liability - Beginning |  | 33,085,016 |  | 30,120,170 |  | 27,729,076 |
| Total Pension Liability - Ending (a) | \$ | 35,517,545 | \$ | 33,085,016 | \$ | 30,120,170 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | 563,328 |  | 446,127 |  | 430,345 |
| Contributions - Member |  | 497,273 |  | 374,825 |  | 368,251 |
| Net Investment Income |  | 725,439 |  | 1,295,301 |  | 4,444,930 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(812,514)$ |  | $(700,905)$ |  | $(600,862)$ |
| Administrative Expense |  | (758) |  | (581) |  | (617) |
| Other |  | $(2,103)$ |  | $(1,617)$ |  | $(2,299)$ |
| Net Change in Plan Fiduciary Net Position |  | 970,665 |  | 1,413,150 |  | 4,639,748 |
| Plan Fiduciary Net Position - Beginning |  | 29,511,959 |  | 28,098,809 |  | 23,459,061 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 30,482,624 | \$ | 29,511,959 | \$ | 28,098,809 |
| Plan's Net Pension Liability (Asset) <br> — Ending (a) - (b) | \$ | 5,034,921 | \$ | 3,573,057 | \$ | 2,021,361 |

${ }^{1}$ Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G of the Financial Section.
This schedule will be built prospectively until it contains 10 years of data. Before 2015, interest on service cost was included in the service cost category.

Required Supplementary Information: Schedule of Changes in Net Pension Liability (cont.)

| SERS Plan 2/3 <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 139,744 | \$ | 128,806 | \$ | 138,228 |
| Interest |  | 343,917 |  | 311,044 |  | 277,012 |
| Changes of Benefit Terms |  | - |  | - |  | - |
| Differences Between Expected and Actual Experience |  | 18,707 |  | 66,049 |  | - |
| Changes in Assumptions |  | 10,258 |  | 600 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(115,247)$ |  | $(99,075)$ |  | $(83,948)$ |
| Net Change in Total Pension Liability |  | 397,378 |  | 407,424 |  | 331,292 |
| Total Pension Liability - Beginning |  | 4,473,428 |  | 4,066,004 |  | 3,734,712 |
| Total Pension Liability - Ending (a) | \$ | 4,870,806 | \$ | 4,473,428 | \$ | 4,066,004 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | 115,480 |  | 97,386 |  | 88,783 |
| Contributions - Member |  | 47,155 |  | 35,445 |  | 31,856 |
| Net Investment Income |  | 100,201 |  | 178,038 |  | 607,982 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(115,247)$ |  | $(99,075)$ |  | $(83,948)$ |
| Administrative Expense |  | (21) |  | (20) |  | (30) |
| Other |  | (806) |  | (580) |  | (462) |
| Net Change in Plan Fiduciary Net Position |  | 146,762 |  | 211,194 |  | 644,181 |
| Plan Fiduciary Net Position - Beginning |  | 4,067,277 |  | 3,856,083 |  | 3,211,902 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 4,214,039 | \$ | 4,067,277 | \$ | 3,856,083 |
| Plan's Net Pension Liability (Asset) <br> - Ending (a) - (b) | \$ | 656,767 | \$ | 406,151 | \$ | 209,921 |


| PSERS Plan 2 <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 44,090 | \$ | 40,546 | \$ | 42,679 |
| Interest |  | 31,038 |  | 24,553 |  | 17,264 |
| Changes of Benefit Terms |  | - |  | - |  | - |
| Differences Between Expected and Actual Experience |  | 266 |  | 19,950 |  | - |
| Changes in Assumptions |  | 84 |  | 131 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(3,277)$ |  | $(3,056)$ |  | $(2,450)$ |
| Net Change in Total Pension Liability |  | 72,201 |  | 82,125 |  | 57,493 |
| Total Pension Liability - Beginning |  | 371,013 |  | 288,888 |  | 231,395 |
| Total Pension Liability - Ending (a) | \$ | 443,214 | \$ | 371,013 | \$ | 288,888 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | 20,058 |  | 18,704 |  | 17,124 |
| Contributions - Member |  | 21,148 |  | 18,664 |  | 17,446 |
| Net Investment Income |  | 10,096 |  | 15,081 |  | 45,143 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(3,277)$ |  | $(3,056)$ |  | $(2,450)$ |
| Administrative Expense |  | (9) |  | (2) |  | (8) |
| Other |  | (61) |  | 1 |  | 5 |
| Net Change in Plan Fiduciary Net Position |  | 47,955 |  | 49,392 |  | 77,260 |
| Plan Fiduciary Net Position - Beginning |  | 352,761 |  | 303,369 |  | 226,109 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 400,716 | \$ | 352,761 | \$ | 303,369 |
| Plan's Net Pension Liability (Asset) <br> - Ending (a) - (b) | \$ | 42,498 | \$ | 18,252 | \$ | $(14,481)$ |

${ }^{1}$ Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1 , Section G of the Financial Section.
This schedule will be built prospectively until it contains 10 years of data. Before 2015 , interest on service cost was included in the service cost category.
$\stackrel{\sim}{\sim}$ Required Supplementary Information: Schedule of Changes in Net Pension Liability (cont.)

| TRS Plan 1 <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 12,608 | \$ | 15,630 | \$ | 21,932 |
| Interest |  | 660,865 |  | 676,915 |  | 690,297 |
| Changes of Benefit Terms |  | - |  | - |  | - |
| Differences Between Expected and Actual Experience |  | 25,314 |  | 23,516 |  | - |
| Changes in Assumptions |  | $(9,700)$ |  | 6,552 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(925,559)$ |  | $(928,571)$ |  | $(928,237)$ |
| Net Change in Total Pension Liability |  | $(236,473)$ |  | $(205,958)$ |  | $(216,007)$ |
| Total Pension Liability - Beginning |  | 9,237,730 |  | 9,443,688 |  | 9,659,695 |
| Total Pension Liability - Ending (a) | \$ | 9,001,257 | \$ | 9,237,730 | \$ | 9,443,688 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | 315,934 |  | 223,886 |  | 200,674 |
| Contributions - Member |  | 8,802 |  | 10,324 |  | 14,626 |
| Net Investment Income |  | 118,296 |  | 269,742 |  | 1,079,804 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(925,559)$ |  | $(928,571)$ |  | $(928,237)$ |
| Administrative Expense |  | (41) |  | (28) |  | (143) |
| Other |  | - |  | 1 |  | 51 |
| Net Change in Plan Fiduciary Net Position |  | $(482,568)$ |  | $(424,646)$ |  | 366,775 |
| Plan Fiduciary Net Position - Beginning |  | 6,069,588 |  | 6,494,234 |  | 6,127,459 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 5,587,020 | \$ | 6,069,588 | \$ | 6,494,234 |
| Plan's Net Pension Liability (Asset) <br> - Ending (a) - (b) | \$ | 3,414,237 | \$ | 3,168,142 | \$ | 2,949,454 |


| TRS Plan 2/3 <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 373,617 | \$ | 352,316 | \$ | 374,257 |
| Interest |  | 857,073 |  | 776,944 |  | 684,861 |
| Changes of Benefit Terms |  | - |  | - |  | - |
| Differences Between Expected and Actual Experience |  | $(74,782)$ |  | 163,251 |  | - |
| Changes in Assumptions |  | 16,463 |  | 896 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(220,982)$ |  | $(186,052)$ |  | $(151,510)$ |
| Net Change in Total Pension Liability |  | 951,389 |  | 1,107,354 |  | 907,609 |
| Total Pension Liability - Beginning |  | 11,220,833 |  | 10,113,479 |  | 9,205,870 |
| Total Pension Liability - Ending (a) | \$ | 12,172,222 | \$ | 11,220,833 | \$ | 10,113,479 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | 316,022 |  | 267,038 |  | 249,342 |
| Contributions - Member |  | 68,587 |  | 52,713 |  | 44,012 |
| Net Investment Income |  | 258,942 |  | 453,524 |  | 1,539,895 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(220,982)$ |  | $(186,052)$ |  | $(151,510)$ |
| Administrative Expense |  | (67) |  | (64) |  | (76) |
| Other |  | (608) |  | (618) |  | (401) |
| Net Change in Plan Fiduciary Net Position |  | 421,894 |  | 586,541 |  | 1,681,262 |
| Plan Fiduciary Net Position - Beginning |  | 10,377,031 |  | 9,790,490 |  | 8,109,228 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 10,798,925 | \$ | 10,377,031 | \$ | 9,790,490 |
| Plan's Net Pension Liability (Asset) - Ending (a) - (b) | \$ | 1,373,297 | \$ | 843,802 | \$ | 322,989 |

Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G of the Financial Section.
This schedule will be built prospectively until it contains 10 years of data. Before 2015, interest on service cost was included in the service cost category.

Required Supplementary Information: Schedule of Changes in Net Pension Liability (cont.)

| LEOFF Plan 1 <br> Dollars in Thousands |  |  |  |  |  |  | LEOFF Plan 2 <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  | Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 2,238 | \$ | 3,269 | \$ | 4,279 | Service Cost | \$ | 302,652 | \$ | 286,031 | \$ | 301,625 |
| Interest |  | 315,653 |  | 319,945 |  | 326,717 | Interest |  | 678,563 |  | 609,818 |  | 536,534 |
| Changes of Benefit Terms |  | - |  | - |  | - | Changes of Benefit Terms |  | 25,205 |  | 34,746 |  | - |
| Differences Between Expected and Actual Experience |  | $(21,215)$ |  | $(65,557)$ |  | - | Differences Between Expected and Actual Experience |  | 8,409 |  | 107,309 |  | - |
| Changes in Assumptions |  | - |  | - |  | - | Changes in Assumptions |  | 4 |  | 3,232 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(361,022)$ |  | $(358,745)$ |  | $(355,988)$ | Benefit Payments, Including Refunds of Member Contributions |  | $(190,712)$ |  | $(160,027)$ |  | $(133,949)$ |
| Net Change in Total Pension Liability |  | $(64,346)$ |  | $(101,087)$ |  | $(24,992)$ | Net Change in Total Pension Liability |  | 824,121 |  | 881,110 |  | 704,210 |
| Total Pension Liability - Beginning |  | 4,404,928 |  | 4,506,015 |  | 4,531,007 | Total Pension Liability - Beginning |  | 8,804,869 |  | 7,923,759 |  | 7,219,549 |
| Total Pension Liability - Ending (a) | \$ | 4,340,582 | \$ | 4,404,928 | \$ | 4,506,015 | Total Pension Liability - Ending (a) | \$ | 9,628,990 | \$ | 8,804,869 | \$ | 7,923,759 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  | Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | - |  | 60 |  | 98 | Contributions - Employer |  | 92,049 |  | 89,122 |  | 85,532 |
| Contributions - Member |  | 837 |  | 1,016 |  | 844 | Contributions - State |  | 60,375 |  | 58,339 |  | 55,551 |
| Net Investment Income |  | 120,945 |  | 248,793 |  | 934,123 | Contributions - Member |  | 173,871 |  | 165,772 |  | 151,041 |
| Benefit Payments, Including Refunds of Member Contributions <br> Administrative Expense | $(361,022)$$(41)$ |  | $(358,745)$(18) |  | (44) |  | Net Investment Income |  | 244,028 |  | 430,403 |  | 1,456,267 |
|  |  |  | Benefit Payments, Including Refunds of Member Contributions | $(190,712)$ |  | $(160,027)$ |  | $(133,949)$ |  |
| Other |  |  |  | 237 |  |  |  | - | Administrative Expense |  | $(1,683)$ |  | $(1,504)$ |  | $(1,268)$ |
| Net Change in Plan Fiduciary Net Position |  | $(239,281)$ |  |  |  | $(108,657)$ |  | 579,033 | Other |  | 23 |  | (238) |  | 241 |
| Plan Fiduciary Net Position - Beginning |  | 5,610,149 |  | 5,718,806 |  | 5,139,773 | Net Change in Plan Fiduciary Net Position |  | 377,951 |  | 581,867 |  | 1,613,415 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 5,370,868 | \$ | 5,610,149 | \$ | 5,718,806 | Plan Fiduciary Net Position - Beginning |  | 9,832,669 |  | 9,250,802 |  | 7,637,387 |
| Plan's Net Pension Liability (Asset) —Ending (a) - (b) | \$ | $(1,030,286)$ | \$ | $(1,205,221)$ | \$ | $(1,212,791)$ | Plan Fiduciary Net Position — Ending (b) <br> Plan's Net Pension Liability (Asset) <br> — Ending (a) - (b) | \$ | 10,210,620 | \$ | 9,832,669 | \$ | 9,250,802 |
|  |  |  |  |  |  |  |  | \$ | (581,630) | \$ | $(1,027,800)$ | \$ | $(1,327,043)$ |

${ }^{1}$ Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G of the Financial Section.
This schedule will be built prospectively until it contains 10 years of data. Before 2015, interest on service cost was included in the service cost category.
$\pm$ Required Supplementary Information: Schedule of Changes in Net Pension Liability (cont.)

| WSPRS Plan $1 / 2$ <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | 16,534 | \$ | 16,633 | \$ | 18,041 |
| Interest |  | 83,373 |  | 80,037 |  | 75,249 |
| Changes of Benefit Terms |  | 1,947 |  | 2,258 |  | - |
| Differences Between Expected and Actual Experience |  | $(10,430)$ |  | 8,883 |  | - |
| Changes in Assumptions |  | 2 |  | 17 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(54,159)$ |  | $(50,075)$ |  | $(47,510)$ |
| Net Change in Total Pension Liability |  | 37,266 |  | 57,753 |  | 45,780 |
| Total Pension Liability — Beginning |  | 1,130,177 |  | 1,072,424 |  | 1,026,644 |
| Total Pension Liability — Ending (a) | \$ | 1,167,443 | \$ | 1,130,177 | \$ | 1,072,424 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | 7,044 |  | 6,679 |  | 6,587 |
| Contributions - Member |  | 8,895 |  | 6,323 |  | 6,555 |
| Net Investment Income |  | 25,352 |  | 49,046 |  | 176,856 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(54,159)$ |  | $(50,075)$ |  | $(47,510)$ |
| Administrative Expense |  | (60) |  | (67) |  | (84) |
| Other |  | 429 |  | 293 |  | 509 |
| Net Change in Plan Fiduciary Net Position |  | $(12,499)$ |  | 12,199 |  | 142,913 |
| Plan Fiduciary Net Position - Beginning |  | 1,110,626 |  | 1,098,427 |  | 955,514 |
| Plan Fiduciary Net Position — Ending (b) | \$ | 1,098,127 | \$ | 1,110,626 | \$ | 1,098,427 |
| Plan's Net Pension Liability (Asset) <br> — Ending (a) - (b) | \$ | 69,316 | \$ | 19,551 | \$ | $(26,003)$ |


| JRS <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | /30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability |  |  |  |  |  |  |
| Service Cost | \$ | - | \$ | - | \$ |  |
| Interest |  | 3,704 |  | 4,382 |  | 4,319 |
| Changes of Benefit Terms |  | - |  | - |  | - |
| Differences Between Expected and Actual Experience |  | 20 |  | 1,590 |  |  |
| Changes in Assumptions |  | 8,737 |  | 4,334 |  | - |
| Benefit Payments, Including Refunds of Member Contributions |  | $(9,131)$ |  | $(9,336)$ |  | $(9,480)$ |
| Net Change in Total Pension Liability |  | 3,330 |  | 971 |  | $(5,161)$ |
| Total Pension Liability - Beginning |  | 101,312 |  | 100,341 |  | 105,502 |
| Total Pension Liability - Ending (a) | \$ | 104,642 | \$ | 101,312 | \$ | 100,341 |
| Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
| Contributions - Employer |  | - |  | - |  | - |
| Contributions - State |  | 9,500 |  | 10,600 |  | 10,600 |
| Contributions - Member |  | - |  | - |  | - |
| Net Investment Income |  | 74 |  | 38 |  | 25 |
| Benefit Payments, Including Refunds of Member Contributions |  | $(9,131)$ |  | $(9,336)$ |  | $(9,480)$ |
| Administrative Expense |  | (1) |  | - |  | - |
| Other |  | - |  | - |  | - |
| Net Change in Plan Fiduciary Net Position |  | 442 |  | 1,302 |  | 1,145 |
| Plan Fiduciary Net Position - Beginning |  | 6,333 |  | 5,031 |  | 3,886 |
| Plan Fiduciary Net Position - Ending (b) | \$ | 6,775 | \$ | 6,333 | \$ | 5,031 |
| Plan's Net Pension Liability (Asset) — Ending (a) - (b) | \$ | 97,867 | \$ | 94,979 | \$ | 95,310 |

- Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G of the Financial Section.

This schedule will be built prospectively until it contains 10 years of data. Before 2015, interest on service cost was included in the service cost category

Required Supplementary Information: Schedule of Changes in Net Pension Liability (cont.)

|  | JRF <br> Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
|  | Total Pension Liability |  |  |  |  |  |  |
|  | Service Cost | \$ | - | \$ | \$ - | \$ | - |
|  | Interest |  | 116 |  | 138 |  | 137 |
|  | Changes of Benefit Terms |  | - |  | - |  | - |
|  | Differences Between Expected and Actual Experience |  | 123 |  | 182 |  | - |
|  | Changes in Assumptions |  | 181 |  | 95 |  | - |
|  | Benefit Payments, Including Refunds of Member Contributions |  | (440) |  | (444) |  | (444) |
|  | Net Change in Total Pension Liability |  | (20) |  | (29) |  | (307) |
|  | Total Pension Liability - Beginning |  | 3,117 |  | 3,146 |  | 3,453 |
|  | Total Pension Liability - Ending (a) | \$ | 3,097 | \$ | 3,117 | \$ | 3,146 |
|  | Plan Fiduciary Net Position ${ }^{1}$ |  |  |  |  |  |  |
|  | Contributions - Employer |  | - |  | - |  | - |
|  | Contributions - State |  | 501 |  | - |  | - |
| $\bigcirc$ | Contributions - Member |  | - |  | - |  | - |
| $\stackrel{\text { O}}{\stackrel{\circ}{\square}}$ | Net Investment Income |  | 6 |  | 4 |  | 7 |
| $\begin{aligned} & \overline{\widehat{\omega}} \\ & \stackrel{\rightharpoonup}{\omega} \\ & \stackrel{\rightharpoonup}{\omega} \end{aligned}$ | Benefit Payments, Including Refunds of Member Contributions |  | (440) |  | (444) |  | (444) |
| $\stackrel{3}{3}$ | Administrative Expense |  | - |  | - |  | - |
| 을 | Other |  | - |  | - |  | - |
| $\bar{\square}$ | Net Change in Plan Fiduciary Net Position |  | 67 |  | (440) |  | (437) |
| $\stackrel{\text { N}}{\text { ล1 }}$ | Plan Fiduciary Net Position - Beginning |  | 515 |  | 955 |  | 1,392 |
| - | Plan Fiduciary Net Position - Ending (b) | \$ | 582 | \$ | \$ 515 | \$ | 955 |
| $\begin{aligned} & \text { O} \\ & \stackrel{\circ}{\circ} \\ & \hline 1 \end{aligned}$ | Plan's Net Pension Liability (Asset) — Ending (a) - (b) | \$ | 2,515 |  | \$ 2,602 | \$ | 2,191 |
|  | ${ }^{1}$ Plan fiduciary net position does not include the administrative fund allocations to the trust funds noted in Note 1 , Section $G$ of the Financial Section. |  |  |  |  |  |  |
|  | This schedule will be built prospectively until it contains 10 years of data. Before 2015, interest on service cost was included in the service cost category. |  |  |  |  |  |  |
| $\infty$ |  |  |  |  |  |  |  |

Required Supplementary Information: Schedule of Net Pension Liability

## PERS Plan 1

Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 12,496,872 | \$ | 12,789,242 | \$ | 12,979,104 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 7,126,401 |  | 7,558,312 |  | 7,941,557 |
| Plan Net Pension Liability (Asset) | \$ | 5,370,471 | \$ | 5,230,930 | \$ | 5,037,547 |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 57.03\% |  | 59.10\% |  | 61.19\% |
| Covered-Employee Payroll | \$ | 218,029 | \$ | 260,894 | \$ | 309,665 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | 2,463.19\% |  | 2,005.00\% |  | 1,626.77\% |

PERS Plan 2/3
Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 35,517,545 | \$ | 33,085,016 | \$ | 30,120,170 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 30,482,624 |  | 29,511,959 |  | 28,098,809 |
| Plan Net Pension Liability (Asset) | \$ | 5,034,921 | \$ | 3,573,057 | \$ | 2,021,361 |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 85.82\% |  | 89.20\% |  | 93.29\% |
| Covered-Employee Payroll | \$ | 9,323,463 | \$ | 8,876,898 | \$ | 8,607,757 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | 54.00\% |  | 40.25\% |  | 23.48\% |

## SERS Plan 2/3

Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 4,870,806 | \$ | 4,473,428 | \$ | 4,066,004 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 4,214,039 |  | 4,067,277 |  | 3,856,083 |
| Plan Net Pension Liability (Asset) | \$ | 656,767 | \$ | 406,151 | \$ | 209,921 |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 86.52\% |  | 90.92\% |  | 94.84\% |
| Covered-Employee Payroll | \$ | 1,877,907 | \$ | 1,720,489 | \$ | 1,616,447 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | 34.97\% |  | 23.61\% |  | 12.99\% |

PSERS Plan 2
Dollars in Thousands

|  | 6/30/2016 |  |  | 6/30/2015 |  | 6/30/2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 443,214 | \$ | 371,013 | \$ | 288,888 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 400,716 |  | 352,761 |  | 303,369 |
| Plan Net Pension Liability (Asset) | \$ | 42,498 | \$ | 18,252 | \$ | $(14,481)$ |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 90.41\% |  | 95.08\% |  | 105.01\% |
| Covered-Employee Payroll | \$ | 324,850 | \$ | 293,007 | \$ | 270,102 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | 13.08\% |  | 6.23\% |  | (5.36)\% |

${ }^{1}$ Plan Fiduciary Net Position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.
This schedule will be built prospectively until it contains 10 years of data.

## Required Supplementary Information: Schedule of Net Pension Liability (cont.)

## TRS Plan 1

Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  |  | 6/30/2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 9,001,257 | \$ | 9,237,730 | \$ | 9,443,688 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 5,587,020 |  | 6,069,588 |  | 6,494,234 |
| Plan Net Pension Liability (Asset) | \$ | 3,414,237 | \$ | 3,168,142 | \$ | 2,949,454 |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 62.07\% |  | 65.70\% |  | 68.77\% |
| Covered-Employee Payroll | \$ | 84,193 | \$ | 113,313 | \$ | 148,430 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | 4,055.25\% |  | 2,795.92\% |  | 1,987.10\% |

TRS Plan 2/3
Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 12,172,222 | \$ | 11,220,833 | \$ | 10,113,479 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 10,798,925 |  | 10,377,031 |  | 9,790,490 |
| Plan Net Pension Liability (Asset) | \$ | 1,373,297 | \$ | 843,802 | \$ | 322,989 |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 88.72\% |  | 92.48\% |  | 96.81\% |
| Covered-Employee Payroll | \$ | 5,054,071 | \$ | 4,681,511 | \$ | 4,436,592 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | 27.17\% |  | 18.02\% |  | 7.28\% |

## LEOFF Plan 1

Dollars in Thousands

|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 4,340,582 | \$ | 4,404,928 | \$ | 4,506,015 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 5,370,868 |  | 5,610,149 |  | 5,718,806 |
| Plan Net Pension Liability (Asset) | \$ | $(1,030,286)$ | \$ | $(1,205,221)$ | \$ | $(1,212,791)$ |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 123.74\% |  | 127.36\% |  | 126.91\% |
| Covered-Employee Payroll | \$ | 7,932 | \$ | 10,583 | \$ | 13,888 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | (12,988.98)\% |  | (11,388.27)\% |  | (8,732.65)\% |

## LEOFF Plan 2

Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 9,628,990 | \$ | 8,804,869 | \$ | 7,923,759 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 10,210,620 |  | 9,832,669 |  | 9,250,802 |
| Plan Net Pension Liability (Asset) | \$ | $(581,630)$ | \$ | $(1,027,800)$ | \$ | $(1,327,043)$ |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 106.04\% |  | 111.67\% |  | 116.75\% |
| Covered-Employee Payroll | \$ | 1,804,024 | \$ | 1,744,180 | \$ | 1,674,432 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | (32.24)\% |  | (58.93)\% |  | (79.25)\% |

[^14]Required Supplementary Information: Schedule of Net Pension Liability (cont.)

| WSPRS Plan $1 / 2$ Dollars in Thousands |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| Total Pension Liability | \$ | 1,167,443 | \$ | 1,130,177 | \$ | 1,072,424 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 1,098,127 |  | 1,110,626 |  | 1,098,427 |
| Plan Net Pension Liability (Asset) | \$ | 69,316 | \$ | 19,551 | \$ | $(26,003)$ |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 94.06\% |  | 98.27\% |  | 102.42\% |
| Covered-Employee Payroll | \$ | 86,669 | \$ | 84,379 | \$ | 83,282 |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | 79.98\% |  | 23.17\% |  | (31.22)\% |

## JRS

Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  |  | 6/30/2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 104,642 | \$ | 101,312 | \$ | 100,341 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 6,775 |  | 6,333 |  | 5,031 |
| Plan Net Pension Liability (Asset) | \$ | 97,867 | \$ | 94,979 | \$ | 95,310 |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 6.47\% |  | 6.25\% |  | 5.01\% |
| Covered-Employee Payroll | \$ | - | \$ | - | \$ | - |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | n/a |  | n/a |  | n/a |

JRF
Dollars in Thousands

|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability | \$ | 3,097 | \$ | 3,117 | \$ | 3,146 |
| Plan Fiduciary Net Position ${ }^{1}$ |  | 582 |  | 515 |  | 955 |
| Plan Net Pension Liability (Asset) | \$ | 2,515 | \$ | 2,602 | \$ | 2,191 |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 18.79\% |  | 16.52\% |  | 30.36\% |
| Covered-Employee Payroll | \$ | - | \$ | - | \$ | - |
| Plan Net Pension Liability (Asset) as a Percentage of Covered-Employee Payroll |  | n/a |  | n/a |  | n/a |

${ }^{1}$ Plan Fiduciary Net Position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section. This schedule will be built prospectively until it contains 10 years of data.

Required Supplementary Information: Schedule of Employer Contributions

| PERS Plan 1 <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Contractually Required Contributions (CRC) ${ }^{1}$ | \$ | 573,784 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Actuarially Determined Contributions (ADC) ${ }^{2}$ |  | 623,404 |  | 454,010 |  | 439,067 |  | 534,200 |  | 508,000 |  | 439,300 |  | 627,800 |  | 620,200 |  | 453,100 |  | 397,300 |
| Contributions in Relation to the Actuarially Determined Contributions |  | 595,982 |  | 462,100 |  | 448,895 |  | 266,270 |  | 257,197 |  | 145,585 |  | 154,023 |  | 325,248 |  | 221,787 |  | 118,660 |
| Contribution Deficiency (Excess) | \$ | 27,422 | \$ | $(8,090)$ | \$ | $(9,828)$ | \$ | 267,930 | \$ | 250,803 | \$ | 293,715 | \$ | 473,777 | \$ | 294,952 | \$ | 231,313 | \$ | 278,640 |
| Covered-Employee Payroll ${ }^{3}$ |  | 218,029 |  | 260,894 |  | 309,665 |  | 352,909 |  | 399,564 |  | 493,559 |  | 571,969 |  | 654,711 |  | 713,421 |  | 761,800 |
| Contributions as a Percentage of Covered-Employee Payroll |  | 273.35\% |  | 177.12\% |  | 144.96\% |  | 75.45\% |  | 64.37\% |  | 29.50\% |  | 26.93\% |  | 49.68\% |  | 31.09\% |  | 15.58\% |

Portions of the above contributions were assessed on the covered payrolls of PERS Plan $2 / 3$, SERS Plan $2 / 3$ and PSERS Plan 2.


Required Supplementary Information: Schedule of Employer Contributions (cont.)

${ }^{1}$ See the "Notes to Required Supplementary Information" on page 96 for an explanation of how the CRC and ADC were calculated. The CRC was the same as the ADC in years when no data for the CRC is displayed.
${ }^{2}$ Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.
3 "Covered-employee payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

Required Supplementary Information: Schedule of Employer Contributions (cont.)

| TRS Plan 1 <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Contractually Required Contributions (CRC) ${ }^{1}$ | \$ | 325,771 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Actuarially Determined Contributions (ADC) ${ }^{2}$ |  | 361,481 |  | 218,542 |  | 208,119 |  | 275,400 |  | 254,000 |  | 205,900 |  | 406,100 |  | 391,000 |  | 294,700 |  | 249,800 |
| Contributions in Relation to the Actuarially Determined |  | 315,934 |  | 223,886 |  | 200,674 |  | 118,569 |  | 111,937 |  | 96,803 |  | 112,731 |  | 178,850 |  | 113,089 |  | 60,462 |
| Contribution Deficiency (Excess) | \$ | 45,547 | \$ | $(5,344)$ | \$ | 7,445 | \$ | 156,831 | \$ | 142,063 | \$ | 109,097 | \$ | 293,369 | \$ | 212,150 | \$ | 181,611 | \$ | 189,338 |
| Covered-Employee Payroll ${ }^{3}$ |  | 84,192 |  | 113,313 |  | 148,430 |  | 192,532 |  | 280,366 |  | 349,660 |  | 418,353 |  | 480,118 |  | 525,223 |  | 586,394 |
| Contributions as a Percentage of Covered-Employee Payroll |  | 375.25\% |  | 197.58\% |  | 135.20\% |  | 61.58\% |  | 39.93\% |  | 27.68\% |  | 26.95\% |  | 37.25\% |  | 21.53\% |  | 10.31\% |

Portions of the above contributions were assessed on the covered payrolls of TRS Plan 2/3.

TRS Plan $2 / 3$
Dollars in Thou

Required Supplementary Information: Schedule of Employer Contributions (cont.)

${ }^{1}$ See the "Notes to Required Supplementary Information" on page 96 for an explanation of how the CRC and ADC were calculated. The CRC was the same as the ADC in years when no data for the CRC is displayed.
${ }^{2}$ Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.
3 "Covered-employee payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

Required Supplementary Information: Schedule of Employer Contributions (cont.)

| WSPRS Plan $1 / 2$ <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Contractually Required Contributions (CRC) ${ }^{1}$ |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Actuarially Determined Contributions (ADC) ${ }^{2}$ | \$ | 7,618 | \$ | 6,810 | \$ | 6,677 | \$ | 2,500 | \$ | 2,900 | \$ | 2,300 | \$ | 6,600 | \$ | 5,000 | \$ | 6,800 | \$ | 5,300 |
| Contributions in Relation to the Actuarially Determined Contributions |  | 7,044 |  | 6,679 |  | 6,587 |  | 6,478 |  | 6,454 |  | 5,251 |  | 5,271 |  | 6,371 |  | 6,064 |  | 3,278 |
| Contribution Deficiency (Excess) | \$ | 574 | \$ | 131 | \$ | 90 | \$ | $(3,978)$ | \$ | $(3,554)$ | \$ | $(2,951)$ | \$ | 1,329 | \$ | $(1,371)$ | \$ | 736 | \$ | 2,022 |
| Covered-Employee Payroll ${ }^{3}$ |  | 86,669 |  | 84,379 |  | 83,282 |  | 81,895 |  | 81,578 |  | 81,882 |  | 82,764 |  | 82,719 |  | 78,781 |  | 72,688 |
| Contributions as a Percentage of Covered-Employee Payroll |  | 8.13\% |  | 7.92\% |  | 7.91\% |  | 7.91\% |  | 7.91\% |  | 6.41\% |  | 6.37\% |  | 7.70\% |  | 7.70\% |  | 4.51\% |


${ }^{1}$ See the "Notes to Required Supplementary Information" on page 96 for an explanation of how the CRC and ADC were calculated. The CRC was the same as the ADC in years when no data for the CRC is displayed.
${ }^{2}$ Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.
${ }^{3}$ "Covered-employee payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.
\& Required Supplementary Information: Schedule of Employer Contributions (cont.)

| JRF <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Contractually Required Contributions (CRC) ${ }^{1}$ |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Actuarially Determined Contributions (ADC) ${ }^{2}$ | \$ | 444 | \$ | 539 | \$ | 425 | \$ | 400 | \$ | 300 | \$ | 100 | \$ | - | \$ | - | \$ | - | \$ | - |
| Contributions in Relation to the Actuarially Determined Contributions |  | 501 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 300 |  | 300 |
| Contribution Deficiency (Excess) | \$ | (57) | \$ | 539 | \$ | 425 | \$ | 400 | \$ | 300 | \$ | 100 | \$ | - | \$ | - | \$ | (300) | \$ | (300) |
| Covered-Employee Payroll ${ }^{3}$ |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Contributions as a Percentage of Covered-Employee Payroll |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |

${ }^{1}$ See the "Notes to Required Supplementary Information" on page 96 for an explanation of how the CRC and ADC were calculated. The CRC was the same as the ADC in years when no data for the CRC is displayed.
${ }^{2}$ Prior to 2014, the annual required contribution (ARC) amounts were presented for the actuarially determined contributions. The ARC changes each year with the experience of the plans. Factors influencing the experience include changes in funding methods, assumptions, plan provisions, and economic and demographic gains and losses.
3 "Covered-employee payroll" includes employee compensation, as defined by statute, that employers reported to DRS. Employer-reported employee compensation is also used to calculate retirement contributions due to the retirement systems. Total salary or wages employers pay to employees eligible for retirement-system coverage might not be reportable to DRS.

## Required Supplementary Information: Schedule of Investment Returns

| Annual Money-Weighted Rates of Return Net <br> of Investment Expenses |  |  |  |
| :--- | ---: | ---: | ---: |
| Plan | $\mathbf{6 / 3 0 / 2 0 1 6}$ | $\mathbf{6 / 3 0 / 2 0 1 5}$ | $\mathbf{6 / 3 0 / 2 0 1 4}$ |
| PERS Plan 1 | $2.19 \%$ | $4.45 \%$ | $18.76 \%$ |
| PERS Plan 2/3 | $2.47 \%$ | $4.63 \%$ | $18.94 \%$ |
| SERS Plan 2/3 | $2.49 \%$ | $4.64 \%$ | $18.96 \%$ |
| PSERS Plan 2 | $2.75 \%$ | $4.76 \%$ | $18.91 \%$ |
| TRS Plan 1 | $2.09 \%$ | $4.41 \%$ | $18.73 \%$ |
| TRS Plan 2/3 | $2.51 \%$ | $4.65 \%$ | $18.96 \%$ |
| LEOFF Plan 1 | $2.25 \%$ | $4.51 \%$ | $18.82 \%$ |
| LEOFF Plan 2 | $2.48 \%$ | $4.64 \%$ | $18.93 \%$ |
| WSPRS Plan 1/2 | $2.34 \%$ | $4.56 \%$ | $18.87 \%$ |
| JRS | $0.62 \%$ | $0.40 \%$ | $0.16 \%$ |
| JRF | $0.62 \%$ | $0.40 \%$ | $0.16 \%$ |

This schedule will be built prospectively until it contains 10 years of data.

## Notes to Required Supplementary Information

## for the Year Ended June 30, 2016

Methods and Assumptions Used in Calculations of
Actuarially Determined Contributions for PERS, PSERS,
SERS, TRS, LEOFF and WSPRS: The Office of the State
Actuary (OSA) calculates the actuarially determined
contributions (ADC) based on the results of an actuarial
valuation consistent with the state's funding policy
defined in Chapter 41.45 RCW.

Consistent with the state's contribution-rate adoption process, the results of an actuarial valuation with an odd-numbered year valuation date determine the ADC for the biennium that ensues two years later. For example, the actuarial valuation with a June 30, 2015, valuation date, completed in the fall of 2016, determines the ADC for the period beginning July 1, 2017, and ending June 30, 2019.

## Methods and Assumptions Used in Calculations of Actuarially Determined Contributions for JRS and JRF:

OSA calculates the actuarially determined contributions (ADC) based on the results of an actuarial valuation and sets it equal to the expected benefit payments from the plan. Consistent with the state's funding policy defined in Chapters 2.10.90 and 2.12.60 RCW, the Legislature makes biennial appropriations to ensure the fund is solvent so it can make the necessary benefit payments.

## Additional Considerations on ADC for All Plans:

OSA calculates the ADC consistent with the methods described above. Adopted contribution rates could be different pending the actions of the governing bodies. For instance, for the period beginning July 1, 2015, and ending June 30, 2017, the contribution rates the Pension Funding Council adopted, which the Legislature did not change, reflect a phasing in of the increase to contribution rates that resulted from a change to the mortality assumption. The increase is expected to be phased in over three biennia for PERS Plans 1, 2 and 3; TRS Plans 1, 2 and 3; SERS Plans 2 and 3; PSERS Plan 2; and WSPRS Plans 1 and 2.

CRC for All Cost-Sharing Plans (All Plans Other Than WSPRS Plan 1/2, JRS and JRF): For cost-sharing plans, OSA calculates the contractually required contributions (CRC) using the same assumptions and methods as the

ADC except the CRC reflect the adopted contribution rates for the time period shown, which might differ from the contribution rates produced for the ADC.

Additional plan-specific actuarial method and assumption information is located in Note 2, Section B, of the Financial Section.

## Supporting Schedules

## Schedule of Administrative Expenses

For the Year Ended June 30, 2016 - Dollars in Thousands

|  |  | Retirement Pension Trust Funds |  | Deferred <br> Compensation Pension Trust Fund |  | $\begin{array}{r} \text { Totals } \\ \text { June 30, } 2016 \end{array}$ |  | $\begin{array}{r} \text { Totals } \\ \text { June } \mathbf{3 0 ,} 2015 \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current Personnel |  |  |  |  |  |  |  |  |
| Salaries and Wages | \$ | 13,067 | \$ | 994 | \$ | 14,061 | \$ | \$13,327 |
| Employee Benefits |  | 4,704 |  | 369 |  | 5,073 |  | 4,180 |
| Personal Service Contracts |  | 3,624 |  | 235 |  | 3,859 |  | 1,567 |
| Total Personnel Expenses |  | 21,395 |  | 1,598 |  | 22,993 |  | 19,074 |
| Goods and Services |  |  |  |  |  |  |  |  |
| Actuary Services |  | 1,739 |  | - |  | 1,739 |  | 1,610 |
| Archives and Records Management |  | 33 |  | 2 |  | 35 |  | 42 |
| Attorney General Services |  | 131 |  | 15 |  | 146 |  | 132 |
| Audit Services |  | 472 |  | 7 |  | 479 |  | 693 |
| Bad Debts Expense |  | 46 |  | - |  | 46 |  | 98 |
| Collections |  | 51 |  | - |  | 51 |  | 41 |
| Communications |  | 368 |  | 4 |  | 372 |  | 400 |
| Data Processing Services |  | 2,231 |  | 84 |  | 2,315 |  | 2,223 |
| Employee Professional Development and Training |  | 156 |  | 1 |  | 157 |  | 204 |
| Facilities and Services |  | 328 |  | 12 |  | 340 |  | 340 |
| Insurance |  | 10 |  | 1 |  | 11 |  | 8 |
| Legal Fees |  | 1,724 |  | - |  | 1,724 |  | 1,242 |
| LEOFF 2 Board Governance |  | 1,142 |  | - |  | 1,142 |  | 1,144 |
| Medical Consultant Services |  | 36 |  | - |  | 36 |  | 28 |
| Other Contractual Services |  | 926 |  | 14 |  | 940 |  | 703 |
| Other Goods and Services |  | 12 |  | - |  | 12 |  | 11 |
| Personnel Services |  | 41 |  | 3 |  | 44 |  | 44 |
| Printing and Reproduction |  | 181 |  | 6 |  | 187 |  | 199 |
| Rental and Leases |  | 1,394 |  | 97 |  | 1,491 |  | 1,522 |
| Repairs and Alterations |  | 130 |  | 8 |  | 138 |  | 138 |
| Subscriptions |  | 31 |  | - |  | 31 |  | 32 |
| Supplies and Materials |  | 44 |  | 2 |  | 46 |  | 58 |
| Utilities |  | 117 |  | 9 |  | 126 |  | 122 |
| Total Goods and Services |  | 11,343 |  | 265 |  | 11,608 |  | 11,034 |
| Miscellaneous Expenses |  |  |  |  |  |  |  |  |
| Grants, Benefits and Client Services |  | - |  | - |  | - |  | - |
| Noncapitalized Equipment |  | 665 |  | 40 |  | 705 |  | 1,312 |
| Travel |  | 120 |  | 38 |  | 158 |  | 156 |
| Total Miscellaneous Expenses |  | 785 |  | 78 |  | 863 |  | 1,468 |
| Total Current Expenses |  | 33,523 |  | 1,941 |  | 35,464 |  | 31,576 |
| Capital Outlays |  |  |  |  |  |  |  |  |
| Furnishings, Equipment and Software |  | 66 |  | - |  | 66 |  | 54 |
| Improvements Other Than Buildings |  | - |  | - |  | - |  | - |
| Total Capital Outlays |  | 66 |  | - |  | 66 |  | 54 |
| Depreciation and Loss - Capital Assets |  | 79 |  | - |  | 79 |  | 124 |
| Total Administrative Expenses | \$ | 33,668 | \$ | 1,941 | \$ | 35,609 | \$ | 31,754 |

Supporting Schedules (cont.)

## Schedule of Investment Expenses - Pension Trust Funds <br> For the Year Ended June 30, 2016 - Dollars in Thousands

|  | Fees Paid |  | Netted Fees ${ }^{1}$ |  | Total Fees and Expenses |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equity Securities |  |  |  |  |  |  |
| Public Equity Active Management | \$ | 50,907 | \$ | 319 | \$ | 51,226 |
| Public Equity Passive Management |  | 2,195 |  | 810 |  | 3,005 |
| Alternative Investments |  |  |  |  |  |  |
| Private Equity |  | 177,935 |  | 10,060 |  | 187,995 |
| Real Estate |  | 27,113 |  | 4,608 |  | 31,721 |
| Tangible Assets |  | 48,170 |  | - |  | 48,170 |
| Cash Management |  | 2,166 |  | - |  | 2,166 |
| Debt Securities |  | - |  | - |  | - |
| Other Fees |  |  |  |  |  |  |
| Consultants and Accounting |  | 1,270 |  | - |  | 1,270 |
| Legal Fees |  | 1,482 |  | - |  | 1,482 |
| Research Services |  | 2,241 |  | - |  | 2,241 |
| Securities Lending Rebates and Fees |  | 4,377 |  | - |  | 4,377 |
| Miscellaneous Fees |  | 154 |  | - |  | 154 |
| DCP Management Fees |  | 5,181 |  | - |  | 5,181 |
| JRA Management Fees |  | 15 |  | - |  | 15 |
| PERS Plan 3 Management Fees |  | 1,077 |  | - |  | 1,077 |
| SERS Plan 3 Management Fees |  | 462 |  | - |  | 462 |
| TRS Plan 3 Management Fees |  | 3,014 |  | - |  | 3,014 |
| WSIB Operating Costs |  | 15,330 |  | - |  | 15,330 |
| Total Investment Expenses | \$ | 343,089 | \$ | 15,797 | \$ | 358,886 |

${ }^{1}$ Netted fees are included in unrealized gains (losses) in the accompanying financial statements.

Supporting Schedules (cont.)

| Schedule of Payments to Consultants For the Year Ended June 30, 2016 - Dollars in Thousands |  |  |
| :---: | :---: | :---: |
|  | Commission/Fee |  |
| Computer/Technology |  |  |
| Aetea Information Technology Inc. | \$ | 168 |
| Bizagi |  | 1,780 |
| Martin Analysis \& Programming Inc. |  | 321 |
| Software AG USA Inc. |  | 43 |
| Total Computer/Technology |  | 2,312 |
| Legal |  |  |
| Freimund Jackson Tardif \& Benedict Garratt PLLC |  | 283 |
| Gallitono \& O'Connor LLP |  | 155 |
| Ice Miller LLP |  | 45 |
| Total Legal |  | 483 |
| Management |  |  |
| Business Coaching \& Consulting |  | 4 |
| CEM Benchmarking Inc. |  | 45 |
| Charles W. Cammack Associates Inc. |  | 131 |
| Christie O'Loughlin \& Associates |  | 12 |
| CliftonLarsonAllen LLP |  | 76 |
| The Caughlin Group |  | 3 |
| Total Management |  | 271 |
| Recordkeeping |  |  |
| Great-West Life \& Annuity |  | 1,031 |
| ICMA Retirement Corp. |  | 833 |
| Total Recordkeeping |  | 1,864 |
| Total Payments to Consultants | \$ | 4,930 |

For fees paid to investment professionals, refer to the Investment Section of this report.

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## Investment Section

## 2016 Highlights

## Employer Reporting Application

Work began this year on the first stage of modernizing the legacy systems that support DRS' core business functions. The first effort will replace the 20-year-old system used by government employers to report member account and financial information to DRS.

The new Employer Reporting Application (ERA) is expected to be fully rolled out by mid-2018.


## Investment Section

## Report on Investment Activity

Prepared by the Washington State Investment Board

## Overview

The Washington State Investment Board (WSIB) manages retirement fund assets to maximize return at a prudent level of risk (Chapter 43.33A. 110 RCW). Investment decisions are made within the framework of a Strategic Asset Allocation Policy and a series of written WSIB-adopted investment policies for the various asset classes in which the WSIB invests.

The retirement funds, collectively called the Commingled Trust Fund (CTF), increased in value by $\$ 994$ million to $\$ 82.7$ billion during fiscal year 2016. The CTF return was $2.7 \%$ for the fiscal year.

Established on July 1, 1992, the CTF is a diversified pool of investments that invests in fixed income, public equity, private equity, real estate and tangible assets. Additional general information about the CTF includes:

- Participant Concentration: The DRS retirement funds make up $99.7 \%$ of the CTF. Their respective concentrations are:
- PERS 1 ( $8.6 \%$ )
- PERS 2/3 defined benefit (DB) and defined contribution (DC) plans (38.6\%)
- SERS 2/3 DB and DC plans (6.6\%)
- PSERS 2 (0.5\%)
- TRS 1 (6.6\%)
- TRS 2/3 DB and DC plans (18.6\%)
- WSPRS $1 / 2$ (1.4\%)
- LEOFF 1 ( $6.5 \%$ )
- LEOFF 2 (12.3\%)
- External Managers: The WSIB engages about 140 partnerships and external managers to assist in the management of the CTF's investments.
- Risk: The various risks of the CTF portfolio include interest rate risk, credit risk, concentration risk and foreign currency risk, as described in Note 1 of the Financial Section of this report. The WSIB has not created a total fund risk profile for the CTF.
- Leverage: The WSIB does not leverage the CTF porffolio as a whole. Individual securities within the CTF do have leverage; however, the WSIB does not capture this information on a total basis.
- Earnings: The CTF does not distribute earnings directly to the owner funds. The retirement fund plans are allowed to purchase or sell units in the pool, based on the fair value of the underlying assets, on the first business day of each month. The net asset value includes interest and dividend income, which is recognized on a trade-date basis, and purchases and sales of investments, which are recorded on a trade-date basis.
- Expense: The CTF's expense ratio for the year ended June 30, 2016, was $0.40465 \%$.
- Yield: The CTF's fixed income porffolio has a yield of $3.10 \%$.
- Weighted Average Maturity: The CTF fixed income portfolio has a weighted average maturity of 7.8 years. Additional maturity information is available in Note 1 of the Financial Section of this report.


## Basis of Presentation of Investment Data

 Investments are reported at fair value. Unrealized gains and losses are included as investment income.The net assets of the retirement funds are valued on a monthly basis using publicly traded securities, limited partnerships, private equity limited partnerships and real estate limited partnerships.

## Publicly Traded Securities (Corporate Stock, Commingled Funds, Investment Derivatives and Fixed Income):

Fair values are based on published market prices, quotations from national security exchanges and security pricing services as of each month-end closing of the New York Stock Exchange.

Limited Partnerships: The fair value of investments that are organized as limited partnerships and have no readily ascertainable fair value (such as private equity, real estate and tangible assets) has been determined by management based on the individual investment's capital account balance, reported at fair value by the general partner, at the closest available reporting period, adjusted for subsequent contributions, distributions, management fees, changes in value of foreign currency and published market prices for

## Report on Investment Activity (cont.)

certain securities. Independent auditors audit the limited partnership's annual financial statements.

Private Equity Limited Partnerships: The fair value of individual capital account balances is based on the valuations private equity partnerships report using the following methodologies to value the underlying porffolio companies:

- Valuations of publicly traded porffolio companies are based on active exchanges using quoted market prices as of the close of trading for each month-end.
- When a porifolio company investment does not have a readily available market price but has a return that is determined by reference to an asset for which a market price is readily available, valuations are based on the closing market price of the reference asset on the valuation date, adjusted for factors that affect the fair value of the investment held.
- When the porffolio company investments are private holdings and are not traded on active security exchanges, valuation methodologies used consist primarily of income and market approaches. The income approach involves a discounted cash-flow analysis based on porffolio companies' projections. The market approach involves valuing a company at a multiple of a specified financial measure (generally EBITDA, or earnings before interest, taxes, depreciation and amortization) based on multiples at which comparable companies trade.


## Real Estate Limited Partnerships: Real estate

 partnerships provide quarterly valuations, based on the most recent capital account balance, to WSIB management. Individual properties are valued by the partnerships at least annually and are adjusted as frequently as quarterly if material market or operational changes have occurred.Properties are generally externally valued every one to five years, depending on the partnership. Structured finance investments receive quarterly value adjustments by the partners, generally applying the assumption that all such positions will be held to maturity.

Annual audits of most partnerships include a review of compliance with the partnership's valuation policies.

Interest and dividend income is recognized when earned. Capital gains and losses are recognized on a trade-date basis. Purchases and sales of investments are also recorded on a trade-date basis. The investment results reported for these asset classes in the Investment Section reflect these practices.

## Performance

The chart below shows the returns for the CTF on a total fund basis as well as by asset class. Appropriate benchmark returns are provided for comparison purposes.

Returns for the CTF Based on Total Fund and Asset
Class - Periods Ending June 30, 2016

|  | 1-Year | 3-Year | 5-Year | 10-Year |
| :---: | :---: | :---: | :---: | :---: |
| Total Fund | 2.65\% | 8.03\% | 7.51\% | 6.18\% |
| Passive Benchmark | (0.51)\% | 5.90\% | 5.39\% | 5.11\% |
| Fixed Income | 4.77\% | 3.65\% | 3.44\% | 5.78\% |
| Barclays Capital Universal | 5.82\% | 4.20\% | 4.01\% | 5.30\% |
| Tangible | (0.77)\% | 2.59\% | 1.61\% | n/a |
| CPI Lagged One Quarter + 400 bp | 4.87\% | 4.80\% | 5.30\% | n/a |
| Real Estate | 40.43\% | 12.56\% | 12.79\% | 7.48\% |
| 8\% Return Over Rolling 10 Years | n/a | n/a | n/a | 8.00\% |
| NCREIF Lagged One Quarter (for Comparison Purposes) | 11.84\% | 11.91\% | 11.93\% | 7.61\% |
| Public Equity | (2.60)\% | 7.03\% | 6.36\% | 4.75\% |
| Dow Jones Wilshire Global Index | (3.54)\% | 6.46\% | 5.76\% | 4.73\% |
| Private Equity | 4.67\% | 11.80\% | 10.81\% | 8.98\% |
| Russell 3000 Lagged One Quarter + 300 bp | 2.66\% | 14.15\% | 14.01\% | 9.90\% |
| Innovation | (4.80)\% | 5.81\% | 6.90\% | n/a |
| Custom Benchmark | (3.57)\% | (0.64)\% | (2.49)\% | n/a |
| Cash | 0.32\% | 0.18\% | 0.17\% | 1.18\% |
| 90-Day T-Bills | 0.21\% | 0.11\% | 0.10\% | 1.08\% |

Performance information is compiled by the custodian, State Street Bank. Performance numbers are reported net of management fees and are prepared using a time-weighted rate of return based on the current market value.

## Report on Investment Activity (cont.)

## Asset Allocation

Investment performance is a result of two primary factors: individual asset selection and the allocation of the porffolio among asset classes (for example, stocks, fixed income and real estate). Studies suggest that more than $90 \%$ of investment performance can be explained by asset allocation decisions.

Accordingly, the WSIB sets a specific, long-term target asset mix and adopts tight ranges around those targets to control the overall risk and return of the CTF. On a daily basis, the WSIB reviews the asset allocation in relation to the established ranges. Its staff shifts assets whenever the allocation range for an asset exceeds the approved range or when cash is needed elsewhere.

The WSIB reviews changes to the overall asset mix every three to four years.

The chart below shows the CTF's asset allocation as of June 30, 2016, as well as the long-term target allocations.

| Current Asset Allocation and Long-Term |  |  |
| :--- | ---: | ---: |
| Target Allocations - As of June 30, 2016 |  |  |
| Asset Type | Target Allocation | Actual Allocation |
| Fixed Income | $20.00 \%$ | $22.04 \%$ |
| Tangible Assets | $5.00 \%$ | $2.94 \%$ |
| Real Estate | $15.00 \%$ | $15.78 \%$ |
| Public Equity | $37.00 \%$ | $37.95 \%$ |
| Private Equity | $23.00 \%$ | $20.96 \%$ |
| Innovation | $0.00 \%$ | $0.07 \%$ |
| Cash | $0.00 \%$ | $0.26 \%$ |
| Total | $\mathbf{1 0 0 . 0 0 \%}$ | $\mathbf{1 0 0 . 0 0 \%}$ |

## Public Equity

The public equity program uses a global benchmark, the Morgan Stanley All Country World with USA Gross Investable Market Index, reflecting the globalization of capital markets. In a world in which American companies like Coca-Cola get most of their revenue from overseas and many so-called foreign companies serve mainly the U.S., distinctions between "U.S. stocks" and "international stocks" have become increasingly blurred. The WSIB believes the future success of the program depends on investment managers finding the most attractive opportunities
wherever they are in the world.
Because U.S. equity markets are generally efficient and international equity markets are increasingly efficient, most of the WSIB's public equity investments are in lowcost, broad-based passive index funds.

The WSIB employs both passive U.S. equity and passive international equity to maintain policy weights in both areas. All the global equity mandates in which investment firms can pick the most attractive stocks wherever they are in the world (U.S. or international) and all the emerging markets equity mandates are actively managed.
Retirement Funds' 10 Largest Public Equities
As of June 30, 2016

|  | Holdings |  | Exposure by Country |
| :--- | ---: | :--- | ---: |
| Apple Inc. | $1.19 \%$ | United States | $56.64 \%$ |
| Alphabet Inc. | $0.99 \%$ | United Kingdom | $7.35 \%$ |
| Microsoft Corp. | $0.97 \%$ | Japan | $6.21 \%$ |
| Exxon Mobil Corp. | $0.82 \%$ | Switzerland | $3.21 \%$ |
| Nestle SA. | $0.82 \%$ | Germany | $2.60 \%$ |
| Oracle Corp. | $0.75 \%$ | France | $2.54 \%$ |
| Wells Fargo \& Co.. | $0.73 \%$ | Canada | $2.47 \%$ |
| Facebook Inc. | $0.71 \%$ | Australia | $1.87 \%$ |
| Royal Dutch Shell PLC | $0.70 \%$ | China | $1.52 \%$ |
| Novartis AG | $0.69 \%$ | Korea, Republic of | $1.30 \%$ |

## U.S. Equity

The U.S. equity portfolio is structured to capture the returns of the broad U.S. equity market as measured by the Dow Jones Total Stock Market Index (TSMI). The index is composed of all U.S. domiciled common equities for which pricing information is readily available and currently represents about 5,000 companies. The portfolio is managed externally using a passive management strategy that tracks the index.

## Non-U.S. Equity

The non-U.S. equity porffolio is benchmarked to a broad non-U.S. equity benchmark, currently the MSCl All Country World ex U.S. Investable Market Index. About $34 \%$ of the public equity portfolio is invested in non-U.S. markets, $74 \%$ of which is invested in developed markets with the remaining portion invested in the emerging markets.

## Report on Investment Activity (cont.)

Portfolios are managed by external managers employing primarily a passive approach in developed markets and solely active strategies in emerging markets.

## Global Equity

The global equity porffolio is benchmarked to a broad global equity benchmark, currently the MSCI All Country World Index Investable Market Index with U.S. Gross.

About $28 \%$ of the public equity portfolio is invested in global equity strategies, which includes U.S. and non-U.S. markets. External managers employing active strategies manage these strategies.

## Fixed Income

WSIB staff members internally manage the fixed income portfolio using Barclays Capital Universal Index as the performance benchmark. The management strategy is primarily one of sector selection.

The porffolio is structured to be over- or under-weighted relative to the benchmark's sectors: primarily treasuries, agencies, credit, mortgage-backed securities and asset-backed securities. The duration of the portfolio is slightly shorter than that of the Barclays Capital Universal Index.

| Retirement Funds' <br> As of June 30, 2016 |  |  |
| :--- | ---: | ---: |
|  | WSIB Fixed <br> Income | Barclays Capital <br> Universal Index |
| Investment Type | $0.25 \%$ | $0.00 \%$ |
| Cash | $0.00 \%$ | $0.00 \%$ |
| Treasury Inflation Protected Securities (TIPS) | $35.20 \%$ | $30.73 \%$ |
| U.S. Treasury | $0.00 \%$ | $2.08 \%$ |
| U.S. Agency | $58.55 \%$ | $41.65 \%$ |
| U.S. Credit | $4.90 \%$ | $23.56 \%$ |
| Pass-Through Mortgages | $0.33 \%$ | $0.00 \%$ |
| Collateral Mortgage Obligations (CMO) | $0.50 \%$ | $1.57 \%$ |
| Commercial Mortgage-Backed |  |  |
| Securities (CMBS) | $0.28 \%$ | $0.40 \%$ |
| Asset-Backed Securities (ABS) |  |  |

## Private Equity

The private equity porffolio, originated in 1981, is primarily invested in partnerships that acquire or create ongoing businesses or operating companies. The WSIB
has investments in all stages of the business life cycle, from private startup technology companies to large multinational public concerns. These are long-term investments, typically 10 to 12 years in life. They are expected to generate investment returns well in excess of public equity securities.

## Real Estate

The real estate portfolio is invested in a diversified group of properties, including office buildings, retail facilities, apartments, warehouses and specialty properties. The majority of these investments have been made in partnerships with operating management groups. The WSIB invests in real estate both in the United States and internationally.

## Tangible Assets

The board added Tangible Assets to its asset allocation in November 2007 and adopted an investment policy for the new assets class in January 2008.

The long-term allocation target is $5 \%$, plus or minus $2 \%$, and the benchmark is the Consumer Price Index (CPI) lagged one quarter plus 400 basis points. The categories of investments in this asset class are agriculture, commodities, infrastructure, natural resource rights and timber. Because this is a new asset class, the WSIB is still working toward building to its allocated target.

## Porffolio Holdings

A complete list of porffolio holdings is available by contacting:

Washington State Investment Board
2100 Evergreen Park Drive SW
PO Box 40916
Olympia, WA 98504-0916
360-956-4600

## Summary of Investment Policies

The Washington State Investment Board (WSIB), as authorized by statute, has the investment management responsibility for the pension funds. The WSIB manages retirement fund assets to maximize return at a prudent level of risk (RCW 43.33A.110).

## Retirement Fund Asset Allocation

The WSIB establishes asset allocation targets that must be considered at all times when making investment decisions. The asset mix might deviate from the target.

Deviations greater than predetermined, acceptable levels require rebalancing back to the target. If an asset class exceeds its range, the goal of rebalancing is to meet the target allocation within consideration of the other remaining asset classes.

Retirement funds are invested in the Commingled Trust Fund (CTF). The CTF's performance benchmark objective is to exceed the return of a policy benchmark consisting of public market indices weighted according to asset allocation targets. The asset allocation for the CTF is formally reviewed every three or four years.

The WSIB periodically reviews the asset allocation in relation to the established ranges.

## Public Markets Equity

The Public Markets equity program seeks to:

- Achieve the highest return possible from active management with passive as the default consistent with prudent risk management and the desire for downside protection
- Maintain liquidity and transparency in public equity, given the WSIB's allocation to illiquid markets and investment structures in other strategies and/or asset classes
- Provide diversification to the WSIB's overall investment program

The public markets equity portion of the retirement funds invests in publicly traded equities globally, including equity securities in the U.S., developed non-U.S. and emerging markets. The program has a global benchmark, currently the MSCI All Country World Investable Market Index with U.S. Gross (MSCI ACWI IMI w/ U.S. Gross).

## Fixed Income

The WSIB's fixed income investments are actively managed with the goal of exceeding the return of the Barclays Capital Universal Index over the long term. The major permissible investments include U.S. Treasuries and government agencies, Treasury Inflation Protection Securities (TIPS), mortgage-backed securities, asset-backed securities, and credit bonds, both investment grade in quality and below investment grade.

Policy constrains the portfolio from investing more than $1 \%$ of the porffolio's par holdings in any single issuer with a quality rating below investment grade and from having a duration (the sensitivity of the porffolio's market value to changes in the level of interest rates) that is more than $20 \%$ different from the duration of the Universal Index. In addition, the major sector allocations are limited to the following ranges:

| Range Limitations of Major Sector Allocations |  |
| :--- | :---: |
| U.S. Treasuries and Government Agencies | $10-45 \%$ |
| Credit Bonds | $10-80 \%$ |
| Asset-Backed Securities | $0-10 \%$ |
| Commercial Mortgage-Backed Securities | $0-10 \%$ |
| Mortgage-Backed Securities | $5-45 \%$ |

## Private Equity Investing

The WSIB can invest in any appropriate private equity investment opportunity that has the potential for returns superior to traditional investment opportunities and that is not prohibited by law or the WSIB's policies.

These investment types are divided into venture capital investments, corporate finance (including leveraged, management and employee buyouts), distressed, international and mezzanine investments. Private equity investments are made through limited partnership vehicles.

To meet the return and plan objectives, the private equity portfolio has diversified investments in companies in a variety of stages of growth. The porffolio also includes a broad cross-section of opportunities in different industries and geographic regions.

## Summary of Investment Policies (cont.)

## Real Estate Program

The WSIB's real estate program is an externally managed pool of selected partnership investments, intended to provide alternative porffolio characteristics when compared to traditional stock and bond investments.

The majority of the WSIB's partnerships invest in institutional-quality real estate assets that are leased to third parties. Income generated from bond-like lease payments coupled with the hard asset qualities of real estate combine to generate returns that are expected to fall between the return expectations for fixed income and equities.

The real estate porifolio is managed to deliver riskadjusted returns that are consistent with the board's long-term return expectations for the asset class. The WSIB's real estate partnerships typically invest in private real estate assets that are held for long-term income and appreciation.

Many of the WSIB's investment partnerships do not involve co-investment with other financial entities, thereby providing the WSIB with control provisions related to liquidation, acquisition and ongoing operational decisions for annual capital expenditures.

Volatility within the real estate porffolio is minimized through a combination of factors. First, the majority of the WSIB's partners own real estate assets in a private investment form, which is not subject to public market volatility. Second, real estate capital is diversified among a host of partners with varying investment styles. Third, partnership assets are invested in numerous economic regions, including foreign markets, and in various property types. Fourth, the WSIB's partners invest at different points within the properties' capital structures and life cycles.

The WSIB's current benchmark for real estate is an $8 \%$ return over a rolling 10 years. The National Council of Real Estate Investment Fiduciaries (NCREIF) property index lagged one quarter is still used for comparison purposes but is no longer the policy benchmark.

## Tangible Assets

The WSIB can invest in any tangible asset investment opportunity that demonstrates acceptable risk-adjusted returns as long as law and board policy do not prohibit such opportunities. The WSIB seeks a prudent and disciplined approach to achieving a well-diversified porffolio of tangible asset investments targeting appropriate risk-adjusted returns for the asset class. Staff members make best efforts to obtain significant co-investment from their investment partners to improve alignment of interests.

Staff members prudently seek to diversify the porffolio cognizant of each partner's strategy and business plan. Investments are not made solely to achieve product type or geographic diversification.

## Investment Professionals

For the Year Ended June 30, 2016 - Page 1 of 2

These investment professionals provided services for the retirement funds during fiscal year 2016:

| Private Equity Partners |
| :--- |
| Accel Partners |
| Actis |
| Advent International |
| Affinity Equity Partners |
| Alta Communications |
| Ampersand Ventures |
| Apax Partners |
| Apex Investment Partners |
| Austin Ventures |
| Avenue Capital Group |
| Banc Funds |
| Battery Ventures |
| BC Partners |
| Blackstone Group |
| Boston Ventures |
| Bridgepoint Capital |
| Butler Capital Partners |
| Canaan Partners |
| Capital Resource Partners |
| CDH Investments |
| Charterhouse Capital Partners |
| Cinven Ltd. |
| Clayton, Dubilier \& Rice |
| Code, Hennessy \& Simmons |
| Collinson Howe \& Lennox |
| Cypress Group |
| Denham Capital |
| Doughty Hanson \& Co. |
| Edgewater Funds |
| EIG Global Energy Partners |
| El Dorado Ventures |
| Elevation Partners |
| Endeavour Capital |
| Essex Woodlands |
| Evercore Capital Partners |
| First Reserve Corp. |
| Evergreen Pacific Partners |
| Fisher Lynch Capital |
| Fortress Investment Group |
| FountainVest Partners |
| Francisco Partners |

## Private Equity Partners (cont.)

Frazier \& Co.
Friedman Fleischer \& Lowe
GGV Capital
GI Partners
Gilbert Global Equity Partners
Great Hill Partners
Gryphon Investors
GTCR
H.I.G. Ventures

HarbourVest Partners
Healthcare Ventures
Hellman \& Friedman
Insight Venture Partners
Intersouth Partners
JMI Equity
Kohlberg Kravis Roberts \& Co.
KSL Capital Partners
Leonard Green \& Partners
M/C Venture Partners
Madison Dearborn Partners
MatlinPatterson Global Advisors
Menlo Ventures
Mobius Venture Capital
Morgan Stanley Venture Partners
New Enterprise Associates
Nordic Capital
Oaktree Capital Management
Oak Investment Partners
OVP Venture Partners
PAG Asia Capital
Palamon Capital Partners
Permira
Polaris Venture Partners
Providence Equity Partners
Roark Capital Group
Rhone Capital
Silver Lake Partners
Southern Cross Group
Spark Management Partners
Sprout Group

## Private Equity Partners (cont.)

TA Associates
Tailwind Capital Partners
Technology Crossover Ventures
The Riverside Co.
Three Arch Partners
TowerBrook Capital Partners
TPG Partners
Trident Capital Partners
Triton Partners
U.S. Venture Partners

Union Square Ventures
Unitas Capital
VantagePoint Venture Partners
Vestar Capital Partners
Vision Capital
Vivo Ventures
Warburg Pincus
Welsh, Carson, Anderson \&
Stowe
Worldview Technology Partners

## Real Estate Partners

Aevitas Property Partners
Calzada Capital Partners
Cherokee
Emerging Markets Fund of Funds
Evergreen Investment Advisors
Fillmore Capital Partners
Global Co-Investment
Hemisferio Sul
Hudson Advisors
Morgan Stanley
Pacific Realty
Principal Enterprise Capital
Proprium
Warburg Pincus
Washington Holdings

## Investment Professionals (cont.)

For the Year Ended June 30, 2016 - Page 2 of 2

Tangible Partners<br>Agriculture Capital Management<br>Alinda Capital Partners<br>EnerVest Ltd.<br>Global Infrastructure Partners<br>Highstar Capital<br>International Farming Corp.<br>Laguna Bay Pastoral Co.<br>Lime Rock Resource<br>Orion Resource Partners<br>Prostar Capital<br>Reservoir Resource Partners<br>Sheridan Production Partners<br>Silver Creek Advisory Partners<br>Stonepeak Advisors<br>UBS Farmland Investors<br>Wood Creek Capital<br>Management<br>Warwick Management Co.

## Public Equity Fund <br> Managers

Aberdeen Asset Management PLC
AQR Capital Management
Arrowstreet Capital, LP
BlackRock Institutional Trust Co.
Brandes Investment Partners
D.E. Shaw Investment

Management
Lazard Asset Management LLC
Longview
Magellan Asset Management Ltd.
Mondrian Investment Partners Ltd.
State Street Global Advisors
William Blair \& Co.

## Overlay

State Street Global Advisors

Schedule of Investment Management Fees and Commissions

## For the Year Ended June 30, 2016 <br> Dollars in Thousands

|  | Fees Paid |  | Netted Fees ${ }^{1}$ |  | Total Fees and Expenses |  | Net Assets Under Management |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Equity Securities |  |  |  |  |  |  |  |  |
| Public Equity Active Management | \$ | 50,907 | \$ | 319 | \$ | 51,226 | \$ | 13,820,940 |
| Public Equity Passive Management |  | 2,195 |  | 810 |  | 3,005 |  | 15,946,343 |
| Alternative Investments |  |  |  |  |  |  |  |  |
| Private Equity |  | 177,935 |  | 10,060 |  | 187,995 |  | 17,496,857 |
| Real Estate |  | 27,113 |  | 4,608 |  | 31,721 |  | 13,213,294 |
| Tangible Assets |  | 48,170 |  | - |  | 48,170 |  | 2,522,495 |
| Cash Management |  | 2,166 |  | - |  | 2,166 |  | 1,517,426 |
| Debt Securities |  | - |  | - |  | - |  | 17,939,910 |
| Other Fees |  |  |  |  |  |  |  |  |
| Consultants and Accounting |  | 1,270 |  | - |  | 1,270 |  | n/a |
| Legal Fees |  | 1,482 |  | - |  | 1,482 |  | n/a |
| Research Services |  | 2,241 |  | - |  | 2,241 |  | n/a |
| Securities Lending Rebates and Fees |  | 4,377 |  | - |  | 4,377 |  | n/a |
| Miscellaneous Fees |  | 154 |  | - |  | 154 |  | n/a |
| DCP Management Fees |  | 5,181 |  | - |  | 5,181 |  | - |
| JRA Management Fees |  | 15 |  | - |  | 15 |  | - |
| PERS Plan 3 Management Fees |  | 1,077 |  | - |  | 1,077 |  | - |
| SERS Plan 3 Management Fees |  | 462 |  | - |  | 462 |  | - |
| TRS Plan 3 Management Fees |  | 3,014 |  | - |  | 3,014 |  | - |
| WSIB Operating Costs |  | 15,330 |  | - |  | 15,330 |  | - |
| Total Investment Expenses | \$ | 343,089 | \$ | 15,797 | \$ | 358,886 | \$ | 82,457,265 |

${ }^{1}$ Netted fees are included in unrealized gains (losses) in the accompanying financial statements.

Schedule of Broker Volume and Equity Commissions Paid

| For the Year Ended June 30, 2016 Dollars in Thousands - Page 1 of 5 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Broker | Equity |  |  |  |  |  |  | Fixed Income |  |  |  |
|  | Volume <br> Transacted | Buy Cost |  | Proceeds |  | Commission |  | Long-Term Volume Transacted |  | Short-Term Volume Transacted |  |
| Agora Corde Titul E Val Mob | \$ 3,134 | \$ | 8,180 | \$ | 11,051 | \$ | 12 | \$ | - | \$ | - |
| American Stock Transfer Co. | 5,324 |  | 83,913 |  | - |  | - |  | - |  | - |
| Auerbach Grayson \& Co. Inc. | 50 |  | - |  | 547 |  | 1 |  | - |  | - |
| Australia \& New Zealand Banking Group | - |  | - |  | - |  | - |  | 299,157 |  | - |
| Autonomous LLP | 192 |  | - |  | 3,483 |  | 5 |  | - |  | - |
| Banco Itau SA | 1,509 |  | 2,975 |  | 3,221 |  | 7 |  | - |  | - |
| Banco Pactual SA | 662 |  | 80 |  | 3,736 |  | 3 |  | - |  | - |
| Banco Santander Central Hispano | 1,643 |  | 866 |  | 6,667 |  | 5 |  | - |  | - |
| Banco Santander Central Hispano SA NY | - |  | - |  | - |  | - |  | 18,947 |  | - |
| Banco Santander Serfin SA | - |  | - |  | - |  | - |  | 6,980 |  | - |
| Bank of America Intl. NY United States | - |  | - |  | - |  | - |  | 186,504 |  | - |
| Bank of America Securities LLC | - |  | - |  | - |  | - |  | 238,328 |  | - |
| Bank of America/LaSalle Bank NA | - |  | - |  | - |  | - |  | 3,989 |  | - |
| Bank of New York | - |  | - |  | - |  | - |  | 10,470 |  | - |
| Bank of New York/Barclays London | - |  | - |  | - |  | - |  | 323,137 |  | - |
| Barclays Bank PLC | - |  | - |  | - |  | - |  | 510,031 |  | - |
| Barclays Bank PLC London Branch | - |  | - |  | - |  | - |  | 49,859 |  | - |
| Barclays Capital | 3,397 |  | 13,816 |  | 39,741 |  | 66 |  | - |  | - |
| Barclays Capital Inc. | - |  | - |  | - |  | - |  | 684,071 |  | - |
| Barclays Capital Inc./LE | 21,310 |  | 514,741 |  | 486,970 |  | 2 |  | - |  | - |
| Barclays Capital LE | 2,200 |  | 57,172 |  | 892 |  | 6 |  | - |  | - |
| BBVA Bancomer SA | 2,093,427 |  | 1,565 |  | - |  | - |  | - |  | - |
| BBVA Securities NY | - |  | - |  | - |  | - |  | 22,935 |  | - |
| BlackRock | 10 |  | 165 |  | - |  | - |  | - |  | - |
| Bloomberg Tradebook Europe Ltd. | 6,096 |  | 19,920 |  | 15,518 |  | 18 |  | - |  | - |
| BMO Capital Markets | 83 |  | 3,043 |  | 6,137 |  | 3 |  | - |  | - |
| BMO Capital Markets Corp. Bonds | - |  | - |  | - |  | - |  | 194,452 |  | - |
| BNP Paribas Prime Brokerage Inc. | 2,059 |  | 5,649 |  | - |  | 3 |  | - |  | - |
| BNP Paribas Securities Corp./Fixed Income | - |  | - |  | - |  | - |  | 5,983 |  | - |
| BNP Paribas Securities Services | 502 |  | 2,099 |  | 1,725 |  | 4 |  | - |  | - |
| BNY ConvergeEx Execution Solutions LLC | 14,939 |  | 97,122 |  | 143,040 |  | 72 |  | - |  | - |
| Bony/Toronto Dominion Securities Inc. | - |  | - |  | - |  | - |  | 14,958 |  | - |
| Bradesco SA CTVM | 66 |  | 1,403 |  | - |  | 1 |  | - |  | - |
| BTG Capital Corp. | 21 |  | 301 |  | - |  | 1 |  | - |  | - |
| BTIG LLC | 21 |  | - |  | 108 |  | - |  | - |  | - |
| Cantor Fitzgerald \& Co. | 407 |  | - |  | 7,613 |  | 14 |  | 4,986 |  | - |
| Cantor Fitzgerald Europe | 85 |  | - |  | 974 |  | 1 |  | - |  | - |
| Celfin Capital SA Corredores de Bolsa | 3,848 |  | 3,326 |  | 308 |  | 7 |  | - |  | - |
| China Intl. Capital Co. | 21,298 |  | 17,563 |  | 1,575 |  | 10 |  | - |  | - |
| CIBC World Markets Corp. | - |  | - |  | - |  | - |  | 14,958 |  | - |
| CIBC World Markets Inc. | 102 |  | - |  | 4,250 |  | 3 |  | - |  | - |
| Citibank Mexico | 741 |  | - |  | 3,006 |  | 2 |  | - |  | - |

Schedule of Broker Volume and Equity Commissions Paid (cont.)

For the Year Ended June 30, 2016
Dollars in Thousands - Page 2 of 5


Schedule of Broker Volume and Equity Commissions Paid (cont.)

For the Year Ended June 30, 2016
Dollars in Thousands - Page 3 of 5


Schedule of Broker Volume and Equity Commissions Paid (cont.)

For the Year Ended June 30, 2016
Dollars in Thousands - Page 4 of 5


Schedule of Broker Volume and Equity Commissions Paid (cont.)

## For the Year Ended June 30, 2016 Dollars in Thousands - Page 5 of 5

| Broker | Equity |  |  |  |  |  |  |  | Fixed Income |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume Transacted |  | Buy Cost |  | Proceeds |  | Commission |  | Long-Term Volume Transacted |  | Short-Term Volume Transacted |  |
| Sanford C. Bernstein Ltd. | \$ | 71,216 | \$ | 284,569 | \$ | 211,762 | \$ | 189 | \$ | - | \$ | - |
| Scotia Capital (USA) Inc. |  | 6,899 |  | 2,322 |  | 3,673 |  | 3 |  | 24,930 |  | - |
| Scotia Capital Markets |  | 277 |  | 7,423 |  | - |  | 5 |  | - |  | - |
| SG Americas Securities LLC |  | 20,847 |  | 432,769 |  | 315,536 |  | 159 |  | - |  | - |
| SG Asia Securities (India) Pvt. Ltd. |  | 232 |  | 3,664 |  | - |  | 4 |  | - |  | - |
| SG Securities HK |  | 24,132 |  | 54,947 |  | 59,258 |  | 41 |  | - |  | - |
| Sinopac Securities Corp. |  | 585 |  | 1,402 |  | - |  | 1 |  | - |  | - |
| Skandinaviska Enskilda Banken |  | 212 |  | - |  | 6,907 |  | 10 |  | - |  | - |
| Skandinaviska Enskilda Banken London |  | 108 |  | - |  | 5,078 |  | 8 |  | - |  | - |
| Societe Generale London Branch |  | 8,437 |  | 83,073 |  | 72,270 |  | 63 |  | - |  | - |
| Standard Bank London Ltd. |  | 99 |  | 1,326 |  | - |  | 2 |  | - |  | - |
| Standard CT AIG |  | - |  | - |  | - |  | - |  | 12,963 |  | - |
| State Street Bank \& Trust |  | - |  | - |  | - |  | - |  | - |  | 22,069,652 |
| State Street Global Markets LLC |  | 116 |  | 917 |  | 27 |  | 2 |  | - |  | - |
| Stifel, Nicolaus \& Co. Inc. |  | 1,370 |  | 17,872 |  | - |  | - |  | - |  | - |
| Susquehanna Financial Group LLP |  | 1 |  | 85 |  | - |  | - |  | - |  | - |
| Svenska Handelsbanken |  | 13 |  | - |  | 287 |  | - |  | - |  | - |
| TD Securities (USA) LLC |  | 153 |  | 11,105 |  | 7,494 |  | 6 |  | - |  | - |
| TD Waterhouse Canada |  | 6 |  | - |  | 103 |  | - |  | - |  | - |
| Tera Menkul Degerler AS |  | 4,475 |  | 7,593 |  | 2,232 |  | 10 |  | - |  | - |
| UBS AG |  | 7,966 |  | 101,547 |  | 47,991 |  | 41 |  | - |  | - |
| UBS Financial Services Inc. |  | 25 |  | 521 |  | - |  | - |  | - |  | - |
| UBS Ltd. |  | 28,050 |  | 204,479 |  | 213,562 |  | 205 |  | - |  | - |
| UBS Securities Asia Ltd. |  | 35,186 |  | 49,360 |  | 45,250 |  | 35 |  | - |  | - |
| UBS Securities Canada Inc. |  | 452 |  | 6,022 |  | 3,851 |  | 2 |  | - |  | - |
| UBS Securities LLC |  | 16,998 |  | 369,023 |  | 362,291 |  | 156 |  | 169,522 |  | - |
| UBS Securities Singapore Pte. |  | 7,499 |  | - |  | 1,985 |  | 1 |  | - |  | - |
| UBS Warburg Australia Equities |  | 808 |  | 2,444 |  | 2,540 |  | 1 |  | - |  | - |
| Warburg Dillon Read Securities Co. |  | 4,990 |  | - |  | 3,978 |  | 2 |  | - |  | - |
| Weeden \& Co. |  | 17,273 |  | 296,469 |  | 330,240 |  | 155 |  | - |  | - |
| Wells Fargo Securities LLC |  | 79 |  | 1,489 |  | - |  | - |  | 107,344 |  | - |
| William Blair \& Co. LLC |  | 75 |  | - |  | 6,025 |  | 5 |  | - |  | - |
| Woori Investment \& Securities |  | 57 |  | 5,455 |  | 3,918 |  | 6 |  | - |  | - |
| XP Investimentos CCTVM SA |  | 223 |  | 1,450 |  | - |  | 1 |  | - |  | - |
| Total | \$ | 4,217,275 | \$ | 9,959,576 | \$ | 9,029,843 | \$ | 5,888 | \$ | 40,234,719 | \$ | 22,069,652 |

Summary of Investments Owned - Pension Trust Funds

| Schedule of Investments Owned as of June 30, 2016 Dollars in Thousands - Page 1 of 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Rate | Maturity |  | Market Value | \% of Total Market Value |
| Asset-Backed Securities |  |  |  |  |  |
| Citibank Credit Card Issuance | 1.02 | 2/22/2019 | \$ | 49,911 | 0.06\% |
| Total Asset-Backed Securities |  |  |  | 49,911 | 0.06\% |
| Residential Mortgage-Backed Securities |  |  |  |  |  |
| FNMA Pool AL5255 | 2.50 | 7/1/2028 |  | 72,890 | 0.08\% |
| FNMA Pool AS6932 | 3.00 | 4/1/2046 |  | 50,924 | 0.06\% |
| FNMA Pool AS6815 | 3.00 | 3/1/2046 |  | 50,365 | 0.06\% |
| FNMA Pool AB8447 | 2.50 | 2/1/2028 |  | 45,675 | 0.05\% |
| FNMA Pool AW8713 | 2.50 | 8/1/2029 |  | 43,630 | 0.05\% |
| FED HM LN PC Pool G18540 | 2.50 | 2/1/2030 |  | 43,231 | 0.05\% |
| FED HM LN PC Pool G18529 | 2.50 | 10/1/2029 |  | 40,170 | 0.04\% |
| FNMA Pool AL5250 | 2.50 | 10/1/2028 |  | 38,713 | 0.04\% |
| FED HM LN PC Pool E03033 | 3.00 | 2/1/2027 |  | 37,028 | 0.04\% |
| FNMA Pool AL6736 | 2.00 | 4/1/2025 |  | 35,964 | 0.04\% |
| Other | - | - |  | 425,102 | 0.47\% |
| Total Residential Mortgage-Backed Securities |  |  |  | 883,692 | 0.98\% |
| Commercial Mortgage-Backed Securities |  |  |  |  |  |
| Fannie Mae | 2.50 | 7/25/2028 |  | 30,473 | 0.03\% |
| Citigroup Commercial Mortgage | 5.43 | 10/15/2049 |  | 21,037 | 0.02\% |
| GS Mortgage Securities Trust | 3.52 | 6/10/2047 |  | 16,076 | 0.02\% |
| Freddie Mac | 3.00 | 10/15/2040 |  | 15,363 | 0.02\% |
| Citigroup Commercial Mortgage | 2.79 | 3/10/2047 |  | 13,396 | 0.01\% |
| Morgan Stanley BAML Trust | 3.33 | 5/15/2049 |  | 12,224 | 0.01\% |
| UBS Barclays Commercial Mortgage | 3.09 | 8/10/2049 |  | 10,573 | 0.01\% |
| Wells Fargo Commercial Mortgage | 3.17 | 2/15/2048 |  | 10,459 | 0.01\% |
| Master Asset Securitization Trust | 5.25 | 9/25/2033 |  | 5,135 | 0.01\% |
| GS Mortgage Securities Trust | 3.68 | 8/10/2043 |  | 2,779 | 0.00\% |
| Other | - | - |  | 4,407 | 0.00\% |
| Total Commercial Mortgage-Backed Securities |  |  |  | 141,922 | 0.14\% |
| Corporate Bonds - Domestic Dollar Denominated |  |  |  |  |  |
| Verizon Communications | 5.15 | 9/15/2023 |  | 75,453 | 0.08\% |
| Bank of America NA | 1.13 | 11/14/2016 |  | 69,845 | 0.08\% |
| Reliance Holdings USA | 4.50 | 10/19/2020 |  | 59,368 | 0.07\% |
| Anheuser Busch Inbev Worldwide | 6.88 | 11/15/2019 |  | 58,450 | 0.06\% |
| JPMorgan Chase \& Co. | 1.70 | 3/1/2018 |  | 50,099 | 0.06\% |
| Bank of America Corp. | 3.88 | 8/1/2025 |  | 47,628 | 0.05\% |
| Bayer U.S. Finance LLC | 3.38 | 10/8/2024 |  | 41,463 | 0.05\% |
| Citigroup Inc. | 4.00 | 8/5/2024 |  | 41,156 | 0.05\% |
| HSBC USA Inc. | 1.70 | 3/5/2018 |  | 39,794 | 0.04\% |
| Wisconsin Public Service | 4.75 | 11/1/2044 |  | 36,451 | 0.04\% |
| Other | - | - |  | 1,308,801 | 1.44\% |
| Total Corporate Bonds - Domestic Dollar Denominated |  |  |  | 1,828,508 | 2.02\% |

## Summary of Investments Owned - Pension Trust Funds (cont.)

| Schedule of Investments Owned as of June 30, 2016 Dollars in Thousands - Page 2 of 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Rate | Maturity |  | Market Value | \% of Total Market Value |
| Corporate Bonds - Foreign Nondollar Denominated |  |  |  |  |  |
| Petroleos Mexicanos | 7.19 | 9/12/2024 | \$ | 26,844 | 0.03\% |
| SACI Falabella | 6.50 | 4/30/2023 |  | 24,877 | 0.03\% |
| America Movil SAB de CV | 8.46 | 12/18/2036 |  | 21,349 | 0.02\% |
| Ambev International Finance Co. Ltd. | 9.50 | 7/24/2017 |  | 17,601 | 0.02\% |
| Petroleos Mexicanos | 7.65 | 11/24/2021 |  | 17,023 | 0.02\% |
| Empresas Public Medellin | 7.63 | 9/10/2024 |  | 14,394 | 0.02\% |
| Turkiye Garanti Bankasi | 7.38 | 3/7/2018 |  | 12,899 | 0.01\% |
| BRF SA | 7.75 | 5/22/2018 |  | 12,781 | 0.01\% |
| Akbank TAS | 7.50 | 2/5/2018 |  | 12,472 | 0.01\% |
| Cosan Luxembourg SA | 9.50 | 3/14/2018 |  | 11,734 | 0.01\% |
| Other | - | - |  | 24,081 | 0.03\% |
| Total Corporate Bonds - Foreign Nondollar Denominated |  |  |  | 196,055 | 0.21\% |
| Corporate Bonds - Foreign Dollar Denominated |  |  |  |  |  |
| Perusahaan Gas Negara | 5.13 | 5/16/2024 |  | 77,950 | 0.09\% |
| National Australia Bank | 1.30 | 6/30/2017 |  | 74,899 | 0.08\% |
| Inversiones CMPC SA | 6.13 | 11/5/2019 |  | 71,627 | 0.08\% |
| Petronas Capital Ltd. | 3.50 | 3/18/2025 |  | 68,150 | 0.08\% |
| APT Pipelines Ltd. | 4.20 | 3/23/2025 |  | 61,369 | 0.07\% |
| Ecopetrol SA | 7.63 | 7/23/2019 |  | 57,213 | 0.06\% |
| Bank of Nova Scotia | 2.05 | 6/5/2019 |  | 55,745 | 0.06\% |
| Mega Advance Investments | 5.00 | 5/12/2021 |  | 55,181 | 0.06\% |
| Banco Bradesco (Cayman) | 5.75 | 3/1/2022 |  | 55,018 | 0.06\% |
| Codelco Inc. | 4.50 | 8/13/2023 |  | 52,840 | 0.06\% |
| Other | - | - |  | 6,216,764 | 6.86\% |
| Total Corporate Bonds - Foreign Dollar Denominated |  |  |  | 6,846,756 | 7.56\% |
| U.S. Government Treasuries |  |  |  |  |  |
| U.S. Treasury N/B | 1.25 | 10/31/2018 |  | 606,737 | 0.67\% |
| U.S. Treasury N/B | 2.00 | 8/15/2025 |  | 547,088 | 0.60\% |
| U.S. Treasury N/B | 0.88 | 6/15/2017 |  | 500,364 | 0.55\% |
| U.S. Treasury N/B | 2.38 | 8/15/2024 |  | 466,775 | 0.51\% |
| U.S. Treasury N/B | 1.13 | 5/31/2019 |  | 454,308 | 0.50\% |
| U.S. Treasury N/B | 1.75 | 9/30/2019 |  | 257,125 | 0.28\% |
| U.S. Treasury N/B | 2.63 | 8/15/2020 |  | 213,251 | 0.24\% |
| U.S. Treasury N/B | 1.63 | 11/15/2022 |  | 204,138 | 0.23\% |
| U.S. Treasury N/B | 1.63 | 5/15/2026 |  | 201,821 | 0.22\% |
| U.S. Treasury N/B | 3.00 | 11/15/2045 |  | 160,243 | 0.18\% |
| Other | - | - |  | 2,680,034 | 2.96\% |
| Total U.S. Government Treasuries |  |  |  | 6,291,884 | 6.94\% |

## Summary of Investments Owned - Pension Trust Funds (cont.)

| Schedule of Investments Owned as of June 30, 2016 Dollars in Thousands - Page 3 of 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Rate | Maturity |  | Market Value | \% of Total Market Value |
| Foreign Government and Agencies - Dollar Denominated |  |  |  |  |  |
| Republic of Indonesia | 5.38 | 10/17/2023 | \$ | 56,107 | 0.06\% |
| Province of Manitoba | 2.13 | 6/22/2026 |  | 39,997 | 0.04\% |
| Republic of Peru | 4.13 | 8/25/2027 |  | 32,982 | 0.04\% |
| Export Import Bank China | 3.63 | 7/31/2024 |  | 31,913 | 0.04\% |
| City of Buenos Aires | 7.50 | 6/1/2027 |  | 31,187 | 0.03\% |
| Republic of Colombia | 5.00 | 6/15/2045 |  | 31,147 | 0.03\% |
| Socialist Republic of Vietnam | 4.80 | 11/19/2024 |  | 30,784 | 0.03\% |
| Province of Ontario | 2.00 | 1/30/2019 |  | 30,647 | 0.03\% |
| Nacional Financiera SNC | 3.38 | 11/5/2020 |  | 28,452 | 0.03\% |
| State of Qatar | 5.25 | 1/20/2020 |  | 27,656 | 0.03\% |
| Other | - | - |  | 311,501 | 0.34\% |
| Total Foreign Government and Agencies - Dollar Denominated |  |  |  | 652,373 | 0.70\% |
| Foreign Government and Agencies - Nondollar Denominated |  |  |  |  |  |
| New S. Wales Treasury Corp. | 5.50 | 3/1/2017 |  | 76,138 | 0.08\% |
| Malaysian Government | 4.01 | 9/15/2017 |  | 52,644 | 0.06\% |
| Thailand Government Bond | 3.25 | 6/16/2017 |  | 43,303 | 0.05\% |
| Queensland Treasury Corp. | 4.25 | 7/21/2023 |  | 41,958 | 0.05\% |
| Queensland Treasury Corp. | 6.00 | 9/14/2017 |  | 39,009 | 0.04\% |
| Republica Orient Uruguay | 4.38 | 12/15/2028 |  | 38,843 | 0.04\% |
| Republic of Colombia | 4.38 | 3/21/2023 |  | 36,542 | 0.04\% |
| Republic of Chile | 5.50 | 8/5/2020 |  | 35,971 | 0.04\% |
| Federal Republic of Brazil | 10.25 | 1/10/2028 |  | 32,184 | 0.04\% |
| Nota do Tesouro Nacional | 10.00 | 1/1/2023 |  | 28,483 | 0.03\% |
| Other | - | - |  | 239,741 | 0.26\% |
| Total Foreign Government and Agencies - Nondollar Denominated |  |  |  | 664,816 | 0.73\% |
| Supranational - Nondollar Denominated |  |  |  |  |  |
| International Bank for Reconstruction \& Development | 5.75 | 10/21/2019 |  | 41,423 | 0.05\% |
| International American Development Bank | 6.50 | 8/20/2019 |  | 25,214 | 0.03\% |
| International Finance Corp. | 8.25 | 6/10/2021 |  | 23,618 | 0.03\% |
| International Bank for Reconstruction \& Development | 13.63 | 5/9/2017 |  | 23,374 | 0.03\% |
| International Finance Corp. | 8.00 | 10/20/2019 |  | 22,809 | 0.03\% |
| International Finance Corp. | 7.75 | 12/3/2016 |  | 20,017 | 0.02\% |
| International Bank for Reconstruction \& Development | 6.00 | 2/15/2017 |  | 19,011 | 0.02\% |
| Asian Development Bank | 2.85 | 10/21/2020 |  | 13,131 | 0.01\% |
| Total Supranational - Nondollar Denominated |  |  |  | 188,597 | 0.22\% |

## Summary of Investments Owned - Pension Trust Funds (cont.)



## Summary of Investments Owned - Pension Trust Funds (cont.)

| Schedule of Investments Owned as of June 30, 2016 Dollars in Thousands - Page 5 of 7 |  |  |
| :---: | :---: | :---: |
| Description | Market Value | \% of Total Market Value |
| Commingled Index Funds - Domestic |  |  |
| BTC U.S. IMI Fund | \$ 10,069,766 | 11.11\% |
| Total Commingled Index Funds - Domestic | 10,069,766 | 11.11\% |
| Commingled Index Funds - Foreign |  |  |
| Lazard Freres Capital Management | 394,124 | 0.44\% |
| SPDR S\&P 500 ETF Trust | 1,431 | 0.00\% |
| P2P Global Investments PLC | 382 | 0.00\% |
| Total Commingled Index Funds - Foreign | 395,937 | 0.44\% |
| Cash and Money Market |  |  |
| State Street Bank \& Trust | 1,826,954 | 2.01\% |
| U.S. Dollar | 41,514 | 0.05\% |
| BlackRock Liquidity Funds | 36,491 | 0.04\% |
| Total Cash and Money Market | 1,904,959 | 2.10\% |
| Private Equity |  |  |
| KKR 2006 Fund LP | 896,465 | 0.99\% |
| Warburg Pincus Private Equity XI LP | 743,212 | 0.82\% |
| TPG Partners VI LP | 478,993 | 0.53\% |
| KKR European Fund III LP — USD | 468,965 | 0.52\% |
| Hellman \& Friedman Capital Partners VII LP | 406,366 | 0.45\% |
| Total Pathway | 400,244 | 0.44\% |
| Advent International GPE VII-B LP | 397,993 | 0.44\% |
| Fisher Lynch Co-Investment Partnership II LP | 391,616 | 0.43\% |
| KKR North America Fund XI LP | 388,040 | 0.43\% |
| Oaktree Opportunities Fund IX LP | 382,916 | 0.42\% |
| Other | 12,442,486 | 13.72\% |
| Total Private Equity | 17,397,296 | 19.19\% |
| Real Estate |  |  |
| Evergreen Real Estate Partners LP | 3,536,503 | 3.90\% |
| Principal Enterprise Capital Holdings | 2,927,708 | 3.23\% |
| Calzada Capital Partners LLC | 2,745,545 | 3.03\% |
| Fillmore Strategic Investors | 1,053,838 | 1.16\% |
| Union Square LP | 564,688 | 0.62\% |
| Aevitas Property Partners LLC | 474,701 | 0.52\% |
| PacTrust Realty Association | 322,311 | 0.36\% |
| Emerging Markets Fund of Funds | 260,404 | 0.29\% |
| Morgan Stanley Special Situations Fund III LP | 193,818 | 0.21\% |
| Washington Real Estate Holdings | 158,359 | 0.17\% |
| Other | 972,361 | 1.07\% |
| Total Real Estate | 13,210,236 | 14.56\% |

## Summary of Investments Owned - Pension Trust Funds (cont.)



## Summary of Investments Owned - Pension Trust Funds (cont.)

| Schedule of Investments Owned as of June 30, 2016 Dollars in Thousands - Page 7 of 7 |  |  |  |
| :---: | :---: | :---: | :---: |
| Description | Market Value |  | \% of Total Market Value |
| Equity Index Funds |  |  |  |
| U.S. Large Cap Equity Index | \$ | 1,222,754 | 1.35\% |
| U.S. Small Cap Value Equity Index |  | 375,531 | 0.41\% |
| Global Equity Index |  | 246,092 | 0.27\% |
| Emerging Market Index |  | 104,854 | 0.12\% |
| Total Equity Index Funds |  | 1,949,231 | 2.15\% |
| Guaranteed Investment Contracts |  |  |  |
| Savings Pool |  | 871,704 | 0.97\% |
| Total Guaranteed Investment Contracts |  | 871,704 | 0.97\% |
| Bond Funds |  |  |  |
| Washington State Bond Fund |  | 673,910 | 0.74\% |
| U.S. Socially Responsible Fund |  | 252,675 | 0.28\% |
| Total Bond Funds |  | 926,585 | 1.02\% |
| Short-Term Investment Funds (in Defined Contribution Plans) |  |  |  |
| Short-Term Contribution Interest Fund |  | 171 | 0.00\% |
| WSIB Short-Term Investment Fund |  | 501,622 | 0.55\% |
| Total Short-Term Investment Funds (in Defined Contribution Plans) |  | 501,793 | 0.55\% |
| Securities Under Lending Agreements |  |  |  |
| Collateral Held Under Securities Lending Agreements |  | 683,169 | 0.76\% |
| Total Securities Under Lending Agreements |  | 683,169 | 0.76\% |
| Total Investments | \$ | 90,648,283 | 100.00\% |

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## Actuarial Section

## 2016 Highlights <br> Online transactions for customers

During the past year, DRS established new ways for customers to process transactions through their secure online accounts.

One new tool allows members to update their beneficiary designations (previously a labor-intensive, paper-based process); the other allows retirees to conveniently set up and update direct (electronic) deposit of their benefit payments to their bank or credit union.

## Actuarial Section

## State Actuary's Certification Letter

```
Office of the State Actuary
"Supporting financial security for generations.
October 5, 2016
Ms. Tracy Guerin
Director
Department of Retirement Systems
PO Box 48380
Olympia, Washington 98504-8380
```


## SUBJECT: ACTUARIAL CERTIFICATION LETTER

Dear Ms. Guerin:
At your request, we prepared the following information for inclusion in the 2016 Comprehensive Annual Financial Report (CAFR):

1. Introductory Section.

* Financial Information - Funding Paragraph.

2. Financial Section.
$\Varangle$ Components for the Schedule of Changes in Net Pension Liability (NPL):

- Service Cost; Interest; Changes of Benefit Terms; Differences between Expected and Actual Experience; Changes in Assumptions.
* Total Pension Liability (TPL) component for the Schedule of NPL.
$\dot{*}$ Actuarially Determined Contributions and Contractually Required Contributions components for the Schedule of Contributions.
* Note 2B: Actuarial components of the Governmental Accounting and Standards Board (GASB) 67 requirements.
- Including the TPL component of the Sensitivity of the NPL to Changes in the Discount Rate.
* GASB 67 Notes for Required Supplementary Information:
- Methods and Assumptions.


## State Actuary's Certification Letter (cont.)

## Ms. Tracy Guerin

Page 2 of 4
3. Actuarial Section.

* Funded Status and Funding Progress (one year).
* Schedules of Funding Progress.
* Additional Information for the Defined Benefit Plans.
* Schedules of Active Member Valuation Data.
* Schedules of Retirees and Beneficiaries Added to and Removed from Rolls.
* Summary of Actuarial Assumptions and Methods.
* Solvency Tests.
* Analyses of Selected Experience.

4. Statistical Section.

* Distribution of Membership.
* Schedule of Benefit Recipients by Type of Benefit.
* Schedule of Average Benefit Payments to Service Retirees in Year of Retirement.

The primary purpose of this information is to satisfy the actuarial reporting requirements of GASB and the Government Finance Officers Association (GFOA). Readers should not use this information for other purposes. Please replace this information with more recent information from next year's CAFR when available.

We also prepare annual actuarial valuations for determining contribution requirements and funding progress (a "funding" valuation) consistent with the state's funding policy. The funding valuations serve a different purpose from accounting valuations or measurements, and the results of the funding valuations may not match these accounting disclosures.

We performed the most recent actuarial valuation in 2016 with a valuation date of June 30, 2015. The TPL was calculated as of the valuation date and projected to the measurement date of June 30, 2016. Plan liabilities were rolled forward from June 30, 2015, to June 30, 2016, reflecting each plan's service cost (using the Entry Age cost method), assumed interest, and actual benefit payments.

GASB 67 requires an "asset sufficiency test" to determine whether (or how long) we can use the long-term expected rate of return on assets to measure the present value of accrued plan liabilities for accounting purposes. For this test, we made the following assumptions to determine projected employee and employer contributions:

## State Actuary's Certification Letter (cont.)

Ms. Tracy Guerin

Page 3 of 4

* A 7.7 percent long-term discount rate to determine funding liabilities consistent with current law for calculating future contribution rate requirements for all plans, except the Law Enforcement Officers' and Fire Fighters' Plan 2 which uses a 7.5 percent assumption.
- The Judicial Retirement System (JRS) and Judges are funded on a "pay-as-you-go" basis.
* We reflected actual asset returns through June 30, 2016, and assumed a 7.5 percent rate of investment return on invested assets thereafter, consistent with the long-term expected rate of return (for all plans except JRS and Judges). Please see the 2015 Report on Financial Condition and Economic Experience Study on the Office of the State Actuary's website for additional background on how we selected this assumption.
* With the exception of determining future Plan 1 Unfunded Actuarial Accrued Liability (UAAL) contributions from employers of the Public Employees' Retirement System (PERS), the Teachers' Retirement System (TRS), the School Employees' Retirement System (SERS), and the Public Safety Employees' Retirement System (PSERS), we assumed no new entrants for purposes of the asset sufficiency test.
* Consistent with current law, employers of PERS, TRS, SERS, and PSERS would continue to pay the minimum Plan 1 UAAL contribution rate until the applicable Plan 1 is fully funded.
* The Legislature would continue the current contribution rate phase-in for the new mortality assumptions until the beginning of the 2019-21 Biennium.

For the asset sufficiency test, we also reviewed the resulting contribution projections for reasonability and found them to be reasonable for purposes of performing this test.

Otherwise, we used the same data, assumptions, and methods for the asset sufficiency test as we disclosed in our 2015 Actuarial Valuation Report.

As of this measurement, all plans-with the exception of JRS and Judges ("pay-as-you-go" plans) - are expected to retain sufficient assets to pay all future benefits for current members using current assumptions, current plan provisions, and assuming the continuation of current state funding policy in Chapter 41.45 RCW (the actuarial funding chapter).

We relied on participant data provided by your department to perform the latest actuarial valuation. The Washington State Investment Board, your department, and the Office of the State Treasurer provided financial and asset information. We reviewed the data and the assets for reasonableness as appropriate based on the purpose of the valuation. 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. Please see the Actuarial

## State Actuary's Certification Letter (cont.)

## Ms. Tracy Guerin

Page 4 of 4

Certification Letter in the 2015 Actuarial Valuation Report for additional information on the certification of the latest actuarial valuation results.

We prepared the required accounting disclosures in accordance with GASB Statement 67. Please see the Department of Retirement Systems' 2016 Participating Employer Financial Information Report for our actuarial certification of disclosures that are unique to GASB 68. We relied on the same participant data, assumptions, and methods for the GASB 67 disclosures as we did for the GASB 68 disclosures.

At your request, we also prepared accounting disclosures under the prior GASB Statements 25,27 , and 50 . We prepared all items in accordance with generally accepted actuarial principles and actuarial standards of practice as of the date of this letter.

We certify, to the best of our knowledge, that the actuarial submissions in the 2016 CAFR meet the GFOA standards for actuarial reporting.

The undersigned, with actuarial credentials, meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. We are available to provide extra advice and explanations as needed.

Sincerely,


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


Luke Masselink, ASA, EA, MAAA
Actuary

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## Summary of Plan Provisions

A narrative summary of retirement plans DRS manages is provided in Section B of Note 2 in the Financial Section of this CAFR. A tabular summary of key plan provisions as of June 30,2016, is provided below.

| As of June 30, 2016 - Page 1 of 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Plan | Membership Eligibility | Vesting | Retirement Eligibility | Benefit |
| PERS Plan 1 | State employees, elected officials, employees of local governments, legislative committee employees, community/technical college employees, classified employees of school districts, district/municipal court judges, and some employees of the Supreme Court, Court of Appeals and superior courts (by 9/30/1977) | After five years of eligible service | After 30 years of service, at age 60 with five years of service or at age 55 with 25 years of service | $2 \%$ of Average Final Compensation (AFC) per year of service, capped at $60 \%$ of AFC <br> Judicial Benefit Multiplier (JBM) participants: $3.5 \%$ of AFC per year of service, capped at $75 \%$ of AFC |
| PERS Plan 2 | New members who met the same employer membership eligibility requirements as PERS Plan 1 and were hired on or after 10/1/77, new state agency and higher education members hired on or after 3/1/2002 who chose Plan 2, and new members for all other employers hired on or after 9/1/2002 who chose Plan 2 <br> PERS Plan 2 excludes classified employees of school districts. | After five years of eligible service | At age 65 with five years of service or an actuarially reduced benefit at age 55 with 20 years of service | $2 \%$ of AFC per year of service <br> JBM participants: 3.5\% of AFC per year of service, capped at $75 \%$ of AFC |
| PERS Plan $3^{1}$ | New members who met the same employer membership eligibility requirements as PERS Plan 2, new state agency and higher education members hired on or after 3/1/2002 who chose Plan 3, new members for all other employers hired on or after 9/1/2002 who chose Plan 3, and PERS Plan 2 members hired on or after 10/1/1977 who met transfer eligibility requirements and made a permanent choice to transfer to PERS Plan 3 | Varies | At age 65 if vested or an actuarially reduced benefit at age 55 with 10 years of service (defined benefit portion) | $1 \%$ of AFC per year of service (defined benefit portion) <br> JBM participants: $1.6 \%$ of AFC per year of service, capped at $37.5 \%$ of AFC <br> The defined contribution portion depends on the member's contribution level and on investment performance. |
| SERS Plan 2 | All classified employees of school districts or educational service districts (by 8/31/2000 and employees on or after 7/1/2007 with no past PERS Plan 2 service who chose Plan 2) | After five years of eligible service | After age 65 with five years of service or an actuarially reduced benefit at age 55 with 20 years of service | $2 \%$ of AFC per year of service |
| SERS Plan $3^{1}$ | All classified employees of school districts or educational service districts (on or after 9/1/2000 and employees on or after 7/1/2007 with no past PERS Plan 2 service who chose Plan 3) | Varies | At age 65 if vested or an actuarially reduced benefit at age 55 with 10 years of service (defined benefit portion) | $1 \%$ of AFC per year of service (defined benefit portion) <br> The defined contribution portion depends on the member's contribution level and on investment performance. |
| PSERS Plan 2 | All full-time public safety officers at select state agencies, counties and cities except the cities of Seattle, Spokane and Tacoma (on or after 7/1/2006) | After five years of eligible service | At age 65 with five years of service, at age 60 with 10 years of PSERS service or at age 53 with 20 years of service reduced 3\% for each year younger than age 60 | $2 \%$ of AFC per year of service |

## Summary of Plan Provisions (cont.)

| As of June 30, 2016 - Page 2 of 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Plan | Membership Eligibility | Vesting | Retirement Eligibility | Benefit |
| TRS Plan 1 | All certificated public school employees who worked in an instructional, administrative or supervisory capacity (by 9/30/1977) | After five years of eligible service | Any age with 30 years of service, at age 60 with five years of service or at age 55 with 25 years of service | $2 \%$ of AFC per year of service, capped at $60 \%$ of AFC <br> JBM participants: $3.5 \%$ of AFC per year of service, capped at $75 \%$ of AFC |
| TRS Plan 2 | All certificated public school employees who worked in an instructional, administrative or supervisory capacity (on or after 10/1/1977 and by 6/30/1996 and employees on or after 7/1/2007 who chose Plan 2) | After five years of eligible service | At age 65 with five years of service or an actuarially reduced benefit at age 55 with 20 years of service | $2 \%$ of AFC per year of service |
| TRS Plan $3{ }^{1}$ | All certificated public school employees who worked in an instructional, administrative or supervisory capacity (on or after 7/1/1996 and employees on or after 7/1/2007 who chose Plan 3) | Varies | At age 65 if vested or an actuarially reduced benefit at age 55 with 10 years of service (defined benefit portion) | $1 \%$ of AFC per year of service (defined benefit portion) <br> The defined contribution portion depends on the member's contribution level and on investment performance. |
| LEOFF Plan 1 | All full-time, fully compensated law enforcement officers and fire fighters (by 9/30/1977) | After five years of eligible service | At age 50 with five years of service | 20 or more years of service: $2 \%$ of Final Average Salary (FAS) per year of service 10-19 years of service: $1.5 \%$ of FAS per year of service <br> 5-9 years of service: $1 \%$ of FAS per year of service |
| LEOFF Plan 2 | All full-time, fully compensated law enforcement officers, fire fighters and emergency medical technicians (on or after 10/1/1977) | After five years of eligible service | At age 53 with five years of service or a benefit at age 50 with 20 years of service reduced $3 \%$ for each year younger than age 53 | $2 \%$ of FAS per year of service |
| WSPRS Plan 1 | Commissioned employees of the Washington State Patrol (on or after 8/1/1947 and by 12/31/2002) | No requirement for active members; after five years of eligible service for inactive members | At age 55 or after 25 years of service | $2 \%$ of Average Final Salary (AFS) per year of service, capped at $75 \%$ of AFS |
| WSPRS Plan 2 | Commissioned employees of the Washington State Patrol (on or after 1/1/2003) | No requirement for active members; after five years of eligible service for inactive members | At age 55 or after 25 years of service | $2 \%$ of AFS per year of service, capped at $75 \%$ of AFS |
| JRS | Judges elected or appointed to the Supreme Court, Court of Appeals and superior courts (on or after 8/9/1971 and by $6 / 30 / 1988$; new judges on or after 7/1/1988 join PERS) | After 15 years of service | At age 60 | 15 years of service: $3.5 \%$ of FAS per year of service, capped at $75 \%$ of FAS <br> 10-14 years of service: $3 \%$ of FAS per year of service, capped at $75 \%$ of FAS |
| JRF | Judges elected or appointed to the Supreme Court, Court of Appeals and superior courts (by 8/8/1971) | After 12 years of service | At age 70 with 10 years of service or any age with 18 years of service | Half the monthly salary |

${ }^{1}$ Members who are eligible to choose PERS, SERS or TRS Plan 2 or Plan 3 who don't make a plan choice within 90 days of hire default into PERS, SERS or TRS Plan 3.
Note: DRS publishes handbooks describing the rights and benefits for each system and plan, including disability and survivor benefits. They are available from DRS and are on the DRS website at drs.wa.gov.

## Summary of Actuarial Assumptions and Methods

## 1. Actuarial Assumptions

and Methods Selection
Economic Assumptions and Methods: These were developed in accordance with Washington state law and the Pension Funding Council.

Demographic Assumptions and Methods: They were derived from Washington's Office of the State Actuary and are based on the 2007-2012 Experience Studies (adopted July 2014). Additional assumptions for subsequent events and law changes are current as of the 2015 actuarial valuation report.

## 2. Investment Return

The investment return is $7.7 \%$ per annum for all systems
except LEOFF 2 (7.5\%) and JRS/JRF (4.0\%).

## 3. Mortality Tables

Mortality rates are based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table (except LEOFF 1), which the Society of Actuaries publishes. JRS uses the PERS mortality rates.

The healthy and disabled mortality rates displayed by system have been projected to the valuation date for illustrative purposes only. We use the RP-2000 report's mortality rates combined with $100 \%$ of Scale BB on a generational basis in the valuation.

| RP-2000 Mortality Rates |  |  |  |  | 100\% Scale BB |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Combine |  | Disa |  |  |  |
| Age | Male | Female | Male | Female | Male | Female |
| 20 | 0.0345\% | 0.0191\% | 2.2571\% | 0.7450\% | 0.3000\% | 0.3000\% |
| 25 | 0.0376\% | 0.0207\% | 2.2571\% | 0.7450\% | 0.3000\% | 0.3000\% |
| 30 | 0.0444\% | 0.0264\% | 2.2571\% | 0.7450\% | 0.3000\% | 0.3000\% |
| 35 | 0.0773\% | 0.0475\% | 2.2571\% | 0.7450\% | 0.3000\% | 0.3000\% |
| 40 | 0.1079\% | 0.0706\% | 2.2571\% | 0.7450\% | 0.3000\% | 0.3000\% |
| 45 | 0.1508\% | 0.1124\% | 2.2571\% | 0.7450\% | 0.3000\% | 0.3000\% |
| 50 | 0.2138\% | 0.1676\% | 2.8975\% | 1.1535\% | 0.3000\% | 0.3000\% |
| 55 | 0.3624\% | 0.2717\% | 3.5442\% | 1.6544\% | 0.3000\% | 0.5000\% |
| 60 | 0.6747\% | 0.5055\% | 4.2042\% | 2.1839\% | 0.7000\% | 1.0000\% |
| 65 | 1.2737\% | 0.9706\% | 5.0174\% | 2.8026\% | 1.2000\% | 1.2000\% |
| 70 | 2.2206\% | 1.6742\% | 6.2583\% | 3.7635\% | 1.5000\% | 1.2000\% |
| 75 | 3.7834\% | 2.8106\% | 8.2067\% | 5.2230\% | 1.5000\% | 1.2000\% |
| 80 | 6.4368\% | 4.5879\% | 10.9372\% | 7.2312\% | 1.5000\% | 1.2000\% |
| 85 | 11.0757\% | 7.7446\% | 14.1603\% | 10.0203\% | 1.5000\% | 1.2000\% |
| 90 | 18.3408\% | 13.1682\% | 18.3408\% | 14.0049\% | 1.1000\% | 1.1000\% |
| 95 | 26.7491\% | 19.4509\% | 26.7491\% | 19.4509\% | 0.6000\% | 0.6000\% |
| 100 | 34.4556\% | 23.7467\% | 34.4556\% | 23.7467\% | 0.3000\% | 0.3000\% |
| 105 | 39.7886\% | 29.3116\% | 39.7886\% | 29.3116\% | 0.0000\% | 0.0000\% |
| 110 | 40.0000\% | 36.4617\% | 40.0000\% | 36.4617\% | 0.0000\% | 0.0000\% |
| 115 | 40.0000\% | 40.0000\% | 40.0000\% | 40.0000\% | 0.0000\% | 0.0000\% |
| 120 | 100.0000\% | 100.0000\% | 100.0000\% | 100.0000\% | 0.0000\% | 0.0000\% |

Summary of Actuarial Assumptions and Methods (cont.)

## 3. Mortality Tables (cont.)

| Healthy Mortality Projected to 2015 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS, SERS, PSERS Plans |  | TRS Plans |  | LEOFF, WSPRS Plans |  |
| Offsets | -1 | -1 | -3 | -2 | -1 | 1 |
| Age | Male | Female | Male | Female | Male | Female |
| 20 | 0.0317\% | 0.0182\% | 0.0289\% | 0.0180\% | 0.0317\% | 0.0184\% |
| 25 | 0.0361\% | 0.0193\% | 0.0351\% | 0.0189\% | 0.0361\% | 0.0205\% |
| 30 | 0.0395\% | 0.0238\% | 0.0366\% | 0.0225\% | 0.0395\% | 0.0294\% |
| 35 | 0.0673\% | 0.0417\% | 0.0539\% | 0.0378\% | 0.0673\% | 0.0493\% |
| 40 | 0.0979\% | 0.0621\% | 0.0867\% | 0.0573\% | 0.0979\% | 0.0742\% |
| 45 | 0.1339\% | 0.0987\% | 0.1165\% | 0.0898\% | 0.1339\% | 0.1173\% |
| 50 | 0.1913\% | 0.1486\% | 0.1663\% | 0.1375\% | 0.1913\% | 0.1776\% |
| 55 | 0.3064\% | 0.2260\% | 0.2557\% | 0.2057\% | 0.3064\% | 0.2881\% |
| 60 | 0.5388\% | 0.3858\% | 0.4253\% | 0.3408\% | 0.5388\% | 0.5051\% |
| 65 | 0.9526\% | 0.7279\% | 0.7395\% | 0.6459\% | 0.9526\% | 0.9251\% |
| 70 | 1.6026\% | 1.2549\% | 1.3009\% | 1.1354\% | 1.6026\% | 1.5690\% |
| 75 | 2.7435\% | 2.1499\% | 2.2078\% | 1.9398\% | 2.7435\% | 2.6151\% |
| 80 | 4.6880\% | 3.5052\% | 3.7961\% | 3.1749\% | 4.6880\% | 4.2883\% |
| 85 | 8.0751\% | 5.8707\% | 6.5137\% | 5.2786\% | 8.0751\% | 7.2944\% |
| 90 | 14.2546\% | 10.2060\% | 11.6526\% | 9.1909\% | 14.2546\% | 12.3859\% |
| 95 | 23.0437\% | 16.8029\% | 19.9103\% | 15.6662\% | 23.0437\% | 18.8784\% |
| 100 | 31.6606\% | 22.1856\% | 28.7501\% | 21.4722\% | 31.6606\% | 23.4749\% |
| 105 | 39.2003\% | 27.9055\% | 37.1685\% | 26.6044\% | 39.2003\% | 30.7811\% |
| 110 | 40.0000\% | 35.1544\% | 40.0000\% | 33.7441\% | 40.0000\% | 37.6246\% |
| 115 | 40.0000\% | 39.8308\% | 40.0000\% | 39.3507\% | 40.0000\% | 40.0000\% |
| 120 | 100.0000\% | 100.0000\% | 100.0000\% | 100.0000\% | 100.0000\% | 100.0000\% |


| Disabled Mortality Projected to 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | All Plans Except LEOFF Plan 1 |  | LEOFF Plan $1^{1}$ |  |
| Offsets | 0 | 0 | 2 | 2 |
| Age | Male | Female | Male | Female |
| 20 | 2.1641\% | 0.7143\% | 0.0351\% | 0.0186\% |
| 25 | 2.1641\% | 0.7143\% | 0.0366\% | 0.0214\% |
| 30 | 2.1641\% | 0.7143\% | 0.0539\% | 0.0336\% |
| 35 | 2.1641\% | 0.7143\% | 0.0867\% | 0.0531\% |
| 40 | 2.1641\% | 0.7143\% | 0.1165\% | 0.0817\% |
| 45 | 2.1641\% | 0.7143\% | 0.1663\% | 0.1271\% |
| 50 | 2.7781\% | 1.1060\% | 0.2557\% | 0.1935\% |
| 55 | 3.3982\% | 1.5423\% | 0.4500\% | 0.3242\% |
| 60 | 3.8104\% | 1.8973\% | 0.7937\% | 0.5783\% |
| 65 | 4.2372\% | 2.3668\% | 1.3575\% | 1.0272\% |
| 70 | 5.0648\% | 3.1783\% | 2.2078\% | 1.7451\% |
| 75 | 6.6416\% | 4.4108\% | 3.7961\% | 2.8802\% |
| 80 | 8.8514\% | 6.1067\% | 6.5137\% | 4.7540\% |
| 85 | 11.4599\% | 8.4621\% | 11.0099\% | 8.1356\% |
| 90 | 15.7096\% | 11.9958\% | 18.5531\% | 13.5006\% |
| 95 | 24.5877\% | 17.8792\% | 27.5624\% | 19.7848\% |
| 100 | 33.0363\% | 22.7686\% | 35.6375\% | 24.4015\% |
| 105 | 39.7886\% | 29.3116\% | 40.0000\% | 32.2725\% |
| 110 | 40.0000\% | 36.4617\% | 40.0000\% | 38.6015\% |
| 115 | 40.0000\% | 40.0000\% | 40.0000\% | 40.0000\% |
| 120 | 100.0000\% | 100.0000\% | 100.0000\% | 100.0000\% |

${ }^{1}$ LEOFF 1 uses the RP-2000 healthy mortality table.

Summary of Actuarial Assumptions and Methods (cont.)

## 4. Retirement

| Probability of Service Retirement - Members Hired Before May 1, 2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS Plan 1 |  | PERS Plan $2 / 3$ |  |  |  | SERS Plan $2 / 3$ |  |  |  | PSERS Plan 2 |  |
|  |  |  | Service | ess Than 30 Years | Servic Than o | Greater Equal to 30 Years | Service L | ess Than 30 Years | Servic Than 0 | Greater Equal to 30 Years |  |  |
| Age | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 45 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 46 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 47 | 46\% | 54\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 48 | 55\% | 46\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 49 | 50\% | 38\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 50 | 45\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 51 | 40\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 52 | 40\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 53 | 40\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 2\% |
| 54 | 40\% | 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 2\% |
| 55 | 17\% | 28\% | 2\% | 2\% | 12\% | 12\% | 1\% | 2\% | 12\% | 12\% | 2\% | 2\% |
| 56 | 17\% | 16\% | 3\% | 2\% | 12\% | 12\% | 2\% | 2\% | 12\% | 12\% | 5\% | 4\% |
| 57 | 17\% | 16\% | 4\% | 2\% | 12\% | 12\% | 3\% | 2\% | 12\% | 12\% | 8\% | 6\% |
| 58 | 17\% | 16\% | 5\% | 2\% | 12\% | 12\% | 4\% | 3\% | 12\% | 12\% | 11\% | 8\% |
| 59 | 20\% | 30\% | 6\% | 4\% | 16\% | 24\% | 5\% | 4\% | 16\% | 25\% | 14\% | 10\% |
| 60 | 16\% | 16\% | 7\% | 6\% | 12\% | 12\% | 6\% | 5\% | 12\% | 12\% | 30\% | 34\% |
| 61 | 23\% | 21\% | 8\% | 13\% | 20\% | 20\% | 15\% | 13\% | 21\% | 20\% | 26\% | 26\% |
| 62 | 30\% | 26\% | 24\% | 20\% | 28\% | 28\% | 24\% | 21\% | 30\% | 28\% | 30\% | 34\% |
| 63 | 22\% | 20\% | 22\% | 18\% | 26\% | 26\% | 22\% | 20\% | 28\% | 26\% | 50\% | 52\% |
| 64 | 28\% | 28\% | 56\% | 56\% | 56\% | 56\% | 56\% | 52\% | 57\% | 48\% | 70\% | 70\% |
| 65 | 34\% | 36\% | 40\% | 40\% | 40\% | 40\% | 39\% | 36\% | 39\% | 36\% | 50\% | 35\% |
| 66 | 30\% | 22\% | 24\% | 24\% | 24\% | 24\% | 22\% | 24\% | 22\% | 24\% | 30\% | 35\% |
| 67 | 26\% | 22\% | 24\% | 24\% | 24\% | 24\% | 22\% | 23\% | 22\% | 23\% | 30\% | 35\% |
| 68 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 22\% | 22\% | 22\% | 22\% | 30\% | 35\% |
| 69 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 22\% | 21\% | 22\% | 21\% | 30\% | 35\% |
| 70 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 22\% | 20\% | 22\% | 20\% | 100\% | 100\% |
| 71 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 20\% | 19\% | 20\% | 19\% | 100\% | 100\% |
| 72 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 18\% | 18\% | 18\% | 18\% | 100\% | 100\% |
| 73 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 100\% | 100\% |
| 74 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 100\% | 100\% |
| 75 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 100\% | 100\% |
| 76 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 100\% | 100\% |
| 77 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 100\% | 100\% |
| 78 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 100\% | 100\% |
| 79 | 22\% | 22\% | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 100\% | 100\% |
| 80 | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |

Summary of Actuarial Assumptions and Methods (cont.)

## 4. Retirement (cont.)

| Probability of Service Retirement - Members Hired Before May 1, 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TRS Plan 1 |  |  |  | TRS Plan 2/3 |  |  |  |  |  | LEOFF Plan 1 |  | LEOFF Plan 2 | WSPRS Plan 1/2 |
|  | Service <br> to | Not Equal 30 Years |  | ce Equal 30 Years | Service | ess Than 30 Years |  | ce Equal 30 Years | Servic Than | Greater <br> 30 Years | $\begin{array}{r} \text { Service } \\ \text { Less } \\ \text { Than } \\ 30 \\ \text { Years } \end{array}$ | Service Greater Than or Equal to 30 Years |  |  |
| Age | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male \& Female | Male \& Female | Male \& Female | Male \& Female |
| 45 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 50\% |
| 46 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 33\% |
| 47 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 33\% |
| 48 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 33\% |
| 49 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 30\% |
| 50 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 7\% | 12\% | 3\% | 27\% |
| 51 | 0\% | 0\% | 0\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 7\% | 12\% | 4\% | 24\% |
| 52 | 0\% | 20\% | 36\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 7\% | 12\% | 5\% | 24\% |
| 53 | 22\% | 20\% | 36\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 7\% | 12\% | 10\% | 24\% |
| 54 | 22\% | 20\% | 36\% | 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 10\% | 16\% | 10\% | 24\% |
| 55 | 22\% | 20\% | 36\% | 30\% | 2\% | 2\% | 22\% | 19\% | 13\% | 12\% | 10\% | 20\% | 10\% | 20\% |
| 56 | 22\% | 20\% | 36\% | 30\% | 2\% | 3\% | 22\% | 21\% | 15\% | 14\% | 10\% | 20\% | 10\% | 20\% |
| 57 | 22\% | 20\% | 36\% | 30\% | 2\% | 4\% | 22\% | 23\% | 17\% | 16\% | 13\% | 20\% | 10\% | 20\% |
| 58 | 22\% | 20\% | 39\% | 30\% | 2\% | 5\% | 28\% | 25\% | 19\% | 18\% | 13\% | 20\% | 15\% | 20\% |
| 59 | 22\% | 26\% | 42\% | 30\% | 4\% | 6\% | 34\% | 27\% | 21\% | 22\% | 13\% | 20\% | 15\% | 33\% |
| 60 | 22\% | 20\% | 42\% | 30\% | 6\% | 7\% | 41\% | 29\% | 23\% | 20\% | 23\% | 25\% | 15\% | 33\% |
| 61 | 22\% | 23\% | 42\% | 40\% | 14\% | 15\% | 48\% | 41\% | 25\% | 22\% | 23\% | 25\% | 19\% | 33\% |
| 62 | 35\% | 26\% | 56\% | 50\% | 22\% | 23\% | 55\% | 53\% | 36\% | 32\% | 23\% | 25\% | 23\% | 33\% |
| 63 | 30\% | 22\% | 48\% | 46\% | 20\% | 21\% | 50\% | 49\% | 33\% | 30\% | 23\% | 25\% | 20\% | 33\% |
| 64 | 25\% | 29\% | 40\% | 46\% | 55\% | 48\% | 55\% | 53\% | 55\% | 49\% | 23\% | 25\% | 20\% | 33\% |
| 65 | 36\% | 36\% | 70\% | 55\% | 48\% | 40\% | 48\% | 40\% | 48\% | 40\% | 23\% | 25\% | 25\% | 100\% |
| 66 | 36\% | 36\% | 70\% | 55\% | 41\% | $32 \%$ | 41\% | 32\% | 41\% | 32\% | 23\% | 25\% | 25\% | 100\% |
| 67 | $32 \%$ | 28\% | 70\% | 55\% | 34\% | 24\% | 34\% | 24\% | 34\% | 24\% | 23\% | 25\% | 25\% | 100\% |
| 68 | 28\% | 28\% | 70\% | 55\% | 27\% | 24\% | 27\% | 24\% | 27\% | 24\% | 23\% | 25\% | 25\% | 100\% |
| 69 | 28\% | 28\% | 70\% | 55\% | 27\% | 42\% | 27\% | 42\% | 27\% | 42\% | 23\% | 25\% | 25\% | 100\% |
| 70 | 22\% | 28\% | 100\% | 55\% | 27\% | 30\% | 27\% | 30\% | 27\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 71 | 22\% | 28\% | 100\% | 55\% | 41\% | 30\% | 41\% | 30\% | 41\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 72 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 73 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 74 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 75 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 76 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 77 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 78 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 79 | 22\% | 21\% | 100\% | 100\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% | 100\% | 100\% | 100\% | 100\% |
| 80 | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |

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## Summary of Actuarial Assumptions and Methods (cont.)

## 4. Retirement (cont.)

| Probability of Service Retirement - Members Hired on or After May 1, 2013 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS Plan $2 / 3$ |  |  |  | SERS Plan $2 / 3$ |  |  |  | TRS Plan 2/3 |  |  |  |  |  |
|  | Service Less Than 30 Years |  | Service Greater Than or Equal to 30 Years |  | Service Less Than 30 Years |  | Service Greater Than or Equal to 30 Years |  | Service Less Than 30 Years |  | Service Equal to 30 Years |  | Service Greater Than 30 Years |  |
| Age | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 45 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 46 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 47 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 48 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 49 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 50 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 51 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 52 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 53 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 54 | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 55 | 2\% | 2\% | 9\% | 9\% | 1\% | 2\% | 8\% | 9\% | 2\% | 2\% | 16\% | 14\% | 9\% | 9\% |
| 56 | 3\% | 2\% | 9\% | 8\% | 2\% | 2\% | 8\% | 8\% | 2\% | 3\% | 15\% | 15\% | 10\% | 10\% |
| 57 | 4\% | 2\% | 9\% | 8\% | 3\% | 2\% | 9\% | 8\% | 2\% | 4\% | 14\% | 16\% | 11\% | 11\% |
| 58 | 5\% | 2\% | 9\% | 8\% | 4\% | 3\% | 9\% | 8\% | 2\% | 5\% | 17\% | 17\% | 12\% | 13\% |
| 59 | 6\% | 4\% | 12\% | 15\% | 5\% | 4\% | 11\% | 16\% | 4\% | 6\% | 21\% | 18\% | 14\% | 15\% |
| 60 | 7\% | 6\% | 10\% | 9\% | 6\% | 5\% | 9\% | 9\% | 6\% | 7\% | 25\% | 19\% | 15\% | 14\% |
| 61 | 8\% | 13\% | 15\% | 17\% | 15\% | 13\% | 18\% | 17\% | 14\% | 15\% | 33\% | 29\% | 20\% | 19\% |
| 62 | 24\% | 20\% | 26\% | 24\% | 24\% | 21\% | 27\% | 25\% | 22\% | 23\% | 40\% | 39\% | 30\% | 28\% |
| 63 | 22\% | 18\% | 24\% | 22\% | 22\% | 20\% | 25\% | 23\% | 20\% | 21\% | 35\% | 35\% | 27\% | 26\% |
| 64 | 56\% | 56\% | 56\% | 56\% | 56\% | 52\% | 56\% | 50\% | 55\% | 48\% | 55\% | 50\% | 55\% | 48\% |
| 65 | 40\% | 40\% | 40\% | 40\% | 39\% | $36 \%$ | 39\% | 36\% | 48\% | 40\% | 48\% | 40\% | 48\% | 40\% |
| 66 | 24\% | 24\% | 24\% | 24\% | 22\% | 24\% | 22\% | 24\% | 41\% | 32\% | 41\% | 32\% | 41\% | 32\% |
| 67 | 24\% | 24\% | 24\% | 24\% | 22\% | 23\% | 22\% | 23\% | 34\% | 24\% | 34\% | 24\% | 34\% | 24\% |
| 68 | 24\% | 24\% | 24\% | 24\% | 22\% | 22\% | 22\% | 22\% | 27\% | 24\% | 27\% | 24\% | 27\% | 24\% |
| 69 | 24\% | 24\% | 24\% | 24\% | 22\% | 21\% | 22\% | 21\% | 27\% | 42\% | 27\% | 42\% | 27\% | 42\% |
| 70 | 24\% | 24\% | 24\% | 24\% | 22\% | 20\% | 22\% | 20\% | 27\% | 30\% | 27\% | 30\% | 27\% | 30\% |
| 71 | 24\% | 24\% | 24\% | 24\% | 20\% | 19\% | 20\% | 19\% | 41\% | 30\% | 41\% | 30\% | 41\% | 30\% |
| 72 | 24\% | 24\% | 24\% | 24\% | 18\% | 18\% | 18\% | 18\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 73 | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 74 | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 75 | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 76 | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 77 | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 78 | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 79 | 24\% | 24\% | 24\% | 24\% | 16\% | 17\% | 16\% | 17\% | 55\% | 30\% | 55\% | 30\% | 55\% | 30\% |
| 80 | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |

## Summary of Actuarial Assumptions and Methods (cont.)

## 5. Disablement

| Probability of Disablement - Table 1 of 2 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS Plan $1^{1}$ |  | PERS Plan $2 / 3$ |  | SERS Plan $2 / 3$ |  | PSERS Plan 2 |  |  |  |
|  |  |  |  |  |  |  | Service Less | 10 Years | Servic | ater Than 10 Years |
| Age | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| 20 | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% |
| 25 | 0.0000\% | 0.0000\% | 0.0052\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0052\% | 0.0000\% | 0.0052\% | 0.0000\% |
| 30 | 0.0000\% | 0.0000\% | 0.0115\% | 0.0056\% | 0.0000\% | 0.0048\% | 0.0115\% | 0.0056\% | 0.0115\% | 0.0056\% |
| 35 | 0.0310\% | 0.0319\% | 0.0156\% | 0.0194\% | 0.0081\% | 0.0176\% | 0.0156\% | 0.0194\% | 0.0158\% | 0.0197\% |
| 40 | 0.0762\% | 0.0710\% | 0.0235\% | 0.0275\% | 0.0258\% | 0.0164\% | 0.0235\% | 0.0275\% | 0.0298\% | 0.0348\% |
| 45 | 0.1481\% | 0.1431\% | 0.0476\% | 0.0467\% | 0.0528\% | 0.0214\% | 0.0476\% | 0.0467\% | 0.0607\% | 0.0596\% |
| 50 | 0.2542\% | 0.3023\% | 0.0922\% | 0.1003\% | 0.1213\% | 0.0611\% | 0.0922\% | 0.1003\% | 0.1182\% | 0.1285\% |
| 55 | 0.8240\% | 0.6411\% | 0.2630\% | 0.2782\% | 0.2787\% | 0.1742\% | 0.2630\% | 0.2782\% | 0.3409\% | 0.3606\% |
| 60 | 0.7541\% | 0.3458\% | 0.7863\% | 0.7681\% | 0.6404\% | 0.4971\% | 0.7863\% | 0.7681\% | 0.0000\% | 0.0000\% |
| 65 | 0.2204\% | 0.0386\% | 0.6146\% | 0.5257\% | 0.5928\% | 0.4121\% | 0.6146\% | 0.5257\% | 0.0000\% | 0.0000\% |
| 70 | 0.0644\% | 0.0043\% | 0.1358\% | 0.1315\% | 0.1271\% | 0.1816\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% |
| 75 | 0.0188\% | 0.0005\% | 0.0300\% | 0.0329\% | 0.0272\% | 0.0800\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% |
| 80 | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% |

${ }^{1} 10 \%$ of all PERS Plan 1 disabilities are assumed to be duty related.

| Probability of Disablement - Table 2 of 2 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TRS Plan 1 |  | TRS Plan 2/3 |  | LEOFF <br> Plan 1 | LEOFF <br> Plan 2 | WSPRS Plan 1/2 |
| Age | Male | Female | Male | Female | Male \& Female | Male \& Female | Male \& Female |
| 20 | 0.0013\% | 0.0014\% | 0.0003\% | 0.0003\% | 0.1000\% | 0.0074\% | 0.0052\% |
| 25 | 0.0091\% | 0.0092\% | 0.0024\% | 0.0019\% | 0.1000\% | 0.0191\% | 0.0094\% |
| 30 | 0.0187\% | 0.0190\% | 0.0048\% | 0.0040\% | 0.7968\% | 0.0467\% | 0.0169\% |
| 35 | 0.0321\% | 0.0326\% | 0.0083\% | 0.0068\% | 1.4888\% | 0.0807\% | 0.0306\% |
| 40 | 0.0428\% | 0.0434\% | 0.0111\% | 0.0091\% | 2.3471\% | 0.1360\% | 0.0551\% |
| 45 | 0.0944\% | 0.0957\% | 0.0244\% | 0.0201\% | 4.0000\% | 0.1796\% | 0.0995\% |
| 50 | 0.1634\% | 0.1656\% | 0.0422\% | 0.0347\% | 7.0000\% | 0.3236\% | 0.1794\% |
| 55 | 0.3347\% | 0.3393\% | 0.1118\% | 0.0750\% | 9.0000\% | 0.5534\% | 0.3237\% |
| 60 | 0.4686\% | 0.4750\% | 0.2500\% | 0.1875\% | 10.0000\% | 0.9462\% | 0.0560\% |
| 65 | 0.5633\% | 0.5681\% | 0.2362\% | 0.1552\% | 10.0000\% | 1.6180\% | 0.0000\% |
| 70 | 0.1485\% | 0.1486\% | 0.0334\% | 0.0283\% | 0.0000\% | 0.0000\% | 0.0000\% |
| 75 | 0.0391\% | 0.0389\% | 0.0047\% | 0.0052\% | 0.0000\% | 0.0000\% | 0.0000\% |
| 80 | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% | 0.0000\% |

Rates have been rounded for display purposes.

## Summary of Actuarial Assumptions and Methods (cont.)

## 6. Other Terminations of Employment

| Probability of Termination |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS |  | SERS |  | PSERS |  | TRS |  | LEOFF | WSPRS |
| Years of Service | Male | Female | Male | Female | Male | Female | Male | Female | Male \& Female | Male \& Female |
| 0 | 26.2397\% | 26.2397\% | 24.4766\% | 19.9030\% | 26.2397\% | 26.2397\% | 11.1014\% | 11.1340\% | 10.7033\% | 4.2261\% |
| 1 | 15.4534\% | 16.7747\% | 15.8775\% | 13.1281\% | 15.4534\% | 16.7747\% | 9.0312\% | 9.4565\% | 4.8058\% | 2.0000\% |
| 2 | 10.0683\% | 11.7007\% | 11.6915\% | 10.2908\% | 10.0683\% | 11.7007\% | 5.9789\% | 7.1731\% | 2.4484\% | 2.0000\% |
| 3 | 7.5236\% | 9.2904\% | 9.9510\% | 7.8600\% | 7.5236\% | 9.2904\% | 4.5105\% | 6.1285\% | 1.9350\% | 2.0000\% |
| 4 | 6.3052\% | 7.6024\% | 8.1055\% | 6.7558\% | 6.3052\% | 7.6024\% | 4.1402\% | 5.3084\% | 1.8700\% | 2.0000\% |
| 5 | 5.4443\% | 6.6544\% | 6.6418\% | 6.2423\% | 5.4443\% | 6.6544\% | 3.6847\% | 4.7057\% | 1.8050\% | 2.0000\% |
| 6 | 4.4874\% | 5.7856\% | 6.0762\% | 5.5595\% | 4.4874\% | 5.7856\% | 2.9510\% | 4.0862\% | 1.7400\% | 1.9000\% |
| 7 | 4.1778\% | 5.3301\% | 5.5588\% | 5.2581\% | 4.1778\% | 5.3301\% | 2.7214\% | 3.6698\% | 1.6750\% | 1.7000\% |
| 8 | 3.8895\% | 4.9105\% | 5.0854\% | 4.9707\% | 3.8895\% | 4.9105\% | 2.5097\% | 3.2957\% | 1.6100\% | 1.6000\% |
| 9 | 3.6211\% | 4.5239\% | 4.6524\% | 4.7491\% | 3.6211\% | 4.5239\% | 2.3144\% | 2.9598\% | 1.5450\% | 1.5113\% |
| 10 | 3.3712\% | 4.1677\% | 4.2562\% | 4.5725\% | 3.3712\% | 4.1677\% | 2.1343\% | 2.6581\% | 1.4800\% | 1.3426\% |
| 11 | 3.1386\% | 3.8396\% | 3.8938\% | 4.4832\% | 3.1386\% | 3.8396\% | 1.9683\% | 2.3872\% | 1.4150\% | 1.2000\% |
| 12 | 2.9220\% | 3.5373\% | 3.5622\% | 4.4156\% | 2.9220\% | 3.5373\% | 1.8151\% | 2.1439\% | 1.3500\% | 1.0765\% |
| 13 | 2.7204\% | 3.2588\% | 3.2589\% | 4.4032\% | 2.7204\% | 3.2588\% | 1.6739\% | 1.9254\% | 1.2850\% | 0.9676\% |
| 14 | 2.5327\% | 3.0023\% | 2.9814\% | 4.2560\% | 2.5327\% | 3.0023\% | 1.5437\% | 1.7291\% | 1.2200\% | 0.8701\% |
| 15 | 2.3579\% | 2.7659\% | 2.7275\% | 4.2740\% | 2.3579\% | 2.7659\% | 1.4235\% | 1.6000\% | 1.1550\% | 0.7819\% |
| 16 | 2.1952\% | 2.5482\% | 2.4952\% | 3.9160\% | 2.1952\% | 2.5482\% | 1.3128\% | 1.5500\% | 1.0900\% | 0.7015\% |
| 17 | 2.0437\% | 2.3475\% | 2.4500\% | 3.6424\% | 2.0437\% | 2.3475\% | 1.2106\% | 1.5000\% | 1.0250\% | 0.6274\% |
| 18 | 1.9027\% | 2.1627\% | 2.4000\% | 3.4565\% | 1.9027\% | 2.1627\% | 1.1500\% | 1.4500\% | 0.9600\% | 0.5589\% |
| 19 | 1.7714\% | 1.9925\% | 2.3500\% | 3.2224\% | 1.7714\% | 1.9925\% | 1.1250\% | 1.4000\% | 0.8950\% | 0.4951\% |
| 20 | 1.5311\% | 1.8001\% | 2.3000\% | 3.0000\% | 1.5311\% | 1.8001\% | 1.0000\% | 1.3000\% | 0.8300\% | 0.4354\% |
| 21 | 1.3244\% | 1.5807\% | 2.2500\% | 2.8000\% | 1.3244\% | 1.5807\% | 0.9500\% | 1.2607\% | 0.7650\% | 0.3793\% |
| 22 | 1.1457\% | 1.3880\% | 2.2000\% | 2.7000\% | 1.1457\% | 1.3880\% | 0.9250\% | 1.1837\% | 0.7000\% | 0.3264\% |
| 23 | 0.9910\% | 1.2188\% | 2.0870\% | 2.6000\% | 0.9910\% | 1.2188\% | 0.9000\% | 1.1115\% | 0.6350\% | 0.2764\% |
| 24 | 0.8573\% | 1.0702\% | 1.8198\% | 2.4750\% | 0.8573\% | 1.0702\% | 0.8809\% | 1.0436\% | 0.5700\% | 0.2289\% |
| 25 | 0.7415\% | 0.9397\% | 1.5868\% | 2.2530\% | 0.7415\% | 0.9397\% | 0.8213\% | 0.9799\% | 0.5050\% | 0.0000\% |
| 26 | 0.6415\% | 0.8252\% | 1.3836\% | 2.0508\% | 0.6415\% | 0.8252\% | 0.7658\% | 0.9201\% | 0.4400\% | 0.0000\% |
| 27 | 0.5549\% | 0.7246\% | 1.2065\% | 1.8668\% | 0.5549\% | 0.7246\% | 0.7140\% | 0.8639\% | 0.3750\% | 0.0000\% |
| 28 | 0.4800\% | 0.6363\% | 1.0520\% | 1.6993\% | 0.4800\% | 0.6363\% | 0.6657\% | 0.8111\% | 0.3100\% | 0.0000\% |
| 29 | 0.4152\% | 0.5587\% | 0.9173\% | 1.5469\% | 0.4152\% | 0.5587\% | 0.6207\% | 0.7616\% | 0.2450\% | 0.0000\% |
| 30+ | 0.3591\% | 0.4906\% | 0.7999\% | 1.4081\% | 0.3591\% | 0.4906\% | 0.5788\% | 0.7151\% | 0.1800\% | 0.0000\% |

[^15]
## Summary of Actuarial Assumptions and Methods (cont.)

## 7. Future Salaries

The following tables indicate the scale of relative salary values used to estimate future salaries for valuation purposes. In addition to increases in salary due to
promotions and longevity, there is an assumed $3.75 \%$ per annum rate of increase in the general salary level of the membership. The salary ratio describes the final salary over the current salary.

| Step Salary Increases |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Years | PERS |  | SERS |  | PSERS |  | TRS |  | LEOFF |  | WSPRS |  |
| of <br> Service | Increase | Salary Ratio | Increase | Salary Ratio | Increase | Salary Ratio | Increase | Salary Ratio | Increase | Salary Ratio | Increase | Salary Ratio |
| 0 | 6.00\% | 1.367 | 6.60\% | 1.382 | 6.00\% | 1.367 | 5.10\% | 1.573 | 10.70\% | 1.827 | 8.50\% | 1.642 |
| 1 | 6.00\% | 1.290 | 6.60\% | 1.297 | 6.00\% | 1.290 | 5.10\% | 1.496 | 10.70\% | 1.650 | 8.50\% | 1.513 |
| 2 | 4.70\% | 1.217 | 3.90\% | 1.217 | 4.70\% | 1.217 | 3.90\% | 1.424 | 7.50\% | 1.491 | 6.00\% | 1.395 |
| 3 | 3.60\% | 1.162 | 2.80\% | 1.171 | 3.60\% | 1.162 | 3.90\% | 1.370 | 5.90\% | 1.387 | 5.00\% | 1.316 |
| 4 | 2.90\% | 1.122 | 2.30\% | 1.139 | 2.90\% | 1.122 | 3.50\% | 1.319 | 3.70\% | 1.310 | 5.00\% | 1.253 |
| 5 | 2.20\% | 1.090 | 2.10\% | 1.113 | 2.20\% | 1.090 | 3.00\% | 1.274 | 2.60\% | 1.263 | 5.00\% | 1.194 |
| 6 | 1.50\% | 1.067 | 1.60\% | 1.090 | 1.50\% | 1.067 | 2.70\% | 1.237 | 1.80\% | 1.231 | 3.50\% | 1.137 |
| 7 | 1.20\% | 1.051 | 1.20\% | 1.073 | 1.20\% | 1.051 | 2.70\% | 1.205 | 1.40\% | 1.209 | 0.60\% | 1.098 |
| 8 | 0.90\% | 1.039 | 1.20\% | 1.061 | 0.90\% | 1.039 | 2.60\% | 1.173 | 1.30\% | 1.192 | 0.60\% | 1.092 |
| 9 | 0.70\% | 1.029 | 0.90\% | 1.048 | 0.70\% | 1.029 | 2.40\% | 1.143 | 1.20\% | 1.177 | 0.60\% | 1.085 |
| 10 | 0.50\% | 1.022 | 0.90\% | 1.039 | 0.50\% | 1.022 | 2.20\% | 1.116 | 1.70\% | 1.163 | 0.60\% | 1.079 |
| 11 | 0.40\% | 1.017 | 0.70\% | 1.029 | 0.40\% | 1.017 | 2.00\% | 1.092 | 1.20\% | 1.144 | 0.60\% | 1.072 |
| 12 | 0.30\% | 1.013 | 0.50\% | 1.022 | 0.30\% | 1.013 | 1.80\% | 1.071 | 1.20\% | 1.130 | 0.40\% | 1.066 |
| 13 | 0.30\% | 1.010 | 0.40\% | 1.017 | 0.30\% | 1.010 | 1.50\% | 1.052 | 1.20\% | 1.117 | 0.40\% | 1.062 |
| 14 | 0.20\% | 1.007 | 0.30\% | 1.013 | 0.20\% | 1.007 | 1.20\% | 1.037 | 1.20\% | 1.104 | 0.40\% | 1.057 |
| 15 | 0.20\% | 1.005 | 0.20\% | 1.010 | 0.20\% | 1.005 | 0.90\% | 1.024 | 1.20\% | 1.090 | 0.40\% | 1.053 |
| 16 | 0.20\% | 1.003 | 0.20\% | 1.008 | 0.20\% | 1.003 | 0.50\% | 1.015 | 1.00\% | 1.078 | 0.40\% | 1.049 |
| 17 | 0.10\% | 1.001 | 0.20\% | 1.006 | 0.10\% | 1.001 | 0.20\% | 1.010 | 1.00\% | 1.067 | 0.40\% | 1.045 |
| 18 | 0.00\% | 1.000 | 0.20\% | 1.004 | 0.00\% | 1.000 | 0.10\% | 1.008 | 1.00\% | 1.056 | 0.40\% | 1.041 |
| 19 | 0.00\% | 1.000 | 0.10\% | 1.002 | 0.00\% | 1.000 | 0.10\% | 1.007 | 1.00\% | 1.046 | 0.40\% | 1.037 |
| 20 | 0.00\% | 1.000 | 0.10\% | 1.001 | 0.00\% | 1.000 | 0.10\% | 1.006 | 1.00\% | 1.036 | 0.40\% | 1.032 |
| 21 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.10\% | 1.005 | 0.50\% | 1.025 | 0.40\% | 1.028 |
| 22 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.10\% | 1.004 | 0.50\% | 1.020 | 0.40\% | 1.024 |
| 23 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.10\% | 1.003 | 0.50\% | 1.015 | 0.40\% | 1.020 |
| 24 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.10\% | 1.002 | 0.50\% | 1.010 | 0.40\% | 1.016 |
| 25 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.10\% | 1.001 | 0.50\% | 1.005 | 0.40\% | 1.012 |
| 26 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.40\% | 1.008 |
| 27 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.40\% | 1.004 |
| 28 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 |
| 29 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 |
| 30+ | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 | 0.00\% | 1.000 |

# Summary of Actuarial Assumptions and Methods (cont.) 

## 7. Future Salaries (cont.)

## Relative Salary Values

|  | PERS, SERS, PSERS | TRS | LEOFF | WSPRS |
| :--- | ---: | ---: | ---: | ---: |
| Annual Percent Increase | $4.74 \%$ | $4.58 \%$ | $5.05 \%$ | $4.74 \%$ |
| Attributed to Growth in Active Group Size | $0.95 \%$ | $0.80 \%$ | $1.25 \%$ | $0.95 \%$ |
| Attributed to the Effects of Inflation on Salaries | $3.75 \%$ | $3.75 \%$ | $3.75 \%$ | $3.75 \%$ |

8. Other Specific Assumptions That Have a Material Impact on Valuation Results Members of the following plans increase their Average Final Compensation by an average stated below by cashing out sick leave or annual leave pay or by increasing overtime:

- PERS 1: Up to 4.0\%
- TRS 1: Up to 0.75\%
- LEOFF 1: Up to $4.5 \%$
- WSPRS 1: Up to $7.0 \%$

Post-retirement Cost-of-Living Adjustments (COLAs) are assumed to be a $3.0 \%$ increase each year for all plans, including:

- LEOFF 1: 3.0\%
- Qualifying PERS 1 and TRS 1 members: COLA on minimum benefit levels

LEOFF 2 members are assumed to become disabled or die due to duty-related injury or illness at a rate that varies with age. For more details, contact the Office of the State Actuary.

Other assumptions include the probability of a vested terminated member not withdrawing his or her contributions from the plan, being married, military service, a single-life annuity refund upon death and beneficiary age. More details on these and other assumptions can be obtained from the Office of the State Actuary.

## 9. Change in Assumptions

Assumption Changes: For all systems except
LEOFF 2, we lowered the assumed valuation interest rate from $7.8 \%$ to $7.7 \%$. We also updated the assumed administrative factors.

Method Changes: We corrected how our valuation software calculates nonduty disability benefits for LEOFF Plan 2 active members.

We added new LEOFF 2 and WSPRS benefit definitions within our valuation software to model legislation signed into law during the 2015 legislative session. The law now pays the Labor \& Industries (L\&I) duty-related death survivor benefit from each system's respective trust fund upon remarriage of the survivor. Before this legislation, the L\&I survivor benefit ended when the survivor of a duty-related death remarried.

We changed how we value the basic minimum COLA in PERS 1 and TRS 1. Calculation of this COLA is now included within our valuation soffware instead of using an external model.

## Summary of Actuarial Assumptions and Methods (cont.)

## 10. Actuarial Cost Method

Valuation assets are at market value with annual gains and losses recognized on a graded scale over an eight-year period. Additionally, the actuarial value of assets may not exceed $130 \%$ nor drop below $70 \%$ of the market value of assets. JRS and JRF use the market value of assets for valuation assets.

PERS Plan 1, TRS Plan 1, LEOFF Plan 1, JRS and JRF Funding (Actual Contributions): A variation of the Entry Age Normal (EAN) Cost Method is used for PERS 1 and TRS 1. The contribution toward the unfunded actuarially accrued liability (UAAL) has been developed in the valuation as a level percentage of expected future covered payrolls, which will amortize the UAAL over a rolling 10 -year period. PERS 1 amortizes the UAAL over all PERS, SERS and PSERS payroll, including projected system growth. TRS 1 amortizes the UAAL over all TRS payroll, including projected system growth. PERS 1 has a minimum UAAL rate of $3.50 \%$, and TRS 1 has a minimum UAAL rate of $5.75 \%$. No contributions are required when LEOFF 1 is fully funded. JRS and JRF are funded on a pay-as-you-go basis.

## PERS Plan 2/3, SERS Plan 2/3, TRS Plan 2/3, PSERS

 Plan 2, LEOFF Plan 2 and WSPRS Plan 1/2: The Aggregate Actuarial Cost Method is used to calculate contribution rates. Under this method, the unfunded actuarial present value of fully projected benefits is amortized over the projected earnings of the active group. The entire contribution is normal cost, and no UAAL exists. All gains and losses are amortized over future salaries of current active members.PERS $2 / 3$, TRS $2 / 3$, SERS $2 / 3$ and PSERS 2 minimum contribution rates are based on $80 \%$ of the Entry Age Normal Cost Rate (EANC). WSPRS 1/2 minimum contribution rates are based on $70 \%$ of the EANC. Similarly, LEOFF 2 minimum contribution rates are based on $90 \%$ of the EANC.
11. Change in Funding Policy

None.
12. Material Changes in Benefit Provisions and Contribution Rates
The contribution rates for the 2017-19 biennium are based on the actuarial valuations as of June 30, 2015.

No laws enacted in 2016 had an impact on the latest actuarial valuation (that is, legislation that produced supplemental contributions rate impacts).

## Schedule of Active Member Valuation Data

## PERS Plan 1

| Valuation Date | Active Members | Annual Payroll in Millions | Average Annual Pay | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 3,927 | $\$$ | 230.7 | $\$$ | 58,748 |
| $6 / 30 / 2014$ | 4,782 | 276.8 | 57,884 | $1.5 \%$ |  |
| $6 / 30 / 2013$ | 5,653 | 317.8 | 56,224 | $3.0 \%$ |  |
| $6 / 30 / 2012$ | 6,635 | 370.8 | 55,878 | $0.6 \%$ |  |
| $6 / 30 / 2011$ | 7,733 | 431.8 | 55,842 | $0.1 \%$ |  |
| $6 / 30 / 2010$ | 9,007 | 507.3 | 56,324 | $(0.9) \%$ |  |
| $6 / 30 / 2009$ | 10,354 | 580.2 | 56,034 | $0.5 \%$ |  |
| $6 / 30 / 2008$ | 11,663 | 638.5 | 54,743 | $2.4 \%$ |  |
| $6 / 30 / 2007$ | 12,975 | 676.4 | 52,130 | $5.0 \%$ |  |
| $9 / 30 / 2006$ | 14,213 | 725.5 | 51,042 | $2.1 \%$ |  |

## PERS Plan 2

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 117,768 | $\$$ | $7,204.6$ | $\$$ |
| $6 / 30 / 2014$ | 116,985 | $7,023.3$ | 61,176 |  |
| $6 / 30 / 2013$ | 115,751 | $6,758.5$ | 60,036 |  |
| $6 / 30 / 2012$ | 115,877 | $6,688.2$ | 58,388 |  |
| $6 / 30 / 2011$ | 117,096 | $6,679.4$ | 57,718 |  |
| $6 / 30 / 2010$ | 119,826 | $6,748.3$ | 57,042 |  |
| $6 / 30 / 2009$ | 121,800 | $6,723.9$ | 56,317 |  |
| $6 / 30 / 2008$ | 123,285 | $6,537.5$ | 55,204 |  |
| $6 / 30 / 2007$ | 120,625 | $6,004.6$ | 53,028 |  |
| $9 / 30 / 2006$ | 118,341 | $5,726.6$ | 49,779 |  |

## PERS Plan 3

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 31,602 | $\$$ | $1,779.8$ | $\$$ |
| $6 / 30 / 2014$ | 30,694 | $1,695.4$ | $5.0 \%$ |  |
| $6 / 30 / 2013$ | 29,302 | $1,580.8$ | 55,235 |  |
| $6 / 30 / 2012$ | 28,078 | $1,504.4$ | 53,948 |  |
| $6 / 30 / 2011$ | 27,588 | $1,468.9$ | 53,579 |  |
| $6 / 30 / 2010$ | 27,693 | $1,458.0$ | 53,245 |  |
| $6 / 30 / 2009$ | 27,081 | $1,408.4$ | 52,647 |  |
| $6 / 30 / 2008$ | 26,720 | $1,331.7$ | 52,006 |  |
| $6 / 30 / 2007$ | 24,422 | $1,152.0$ | 49,840 |  |
| $9 / 30 / 2006$ | 22,473 | $1,043.9$ | 47,172 | $46 \%$ |

## Schedule of Active Member Valuation Data (cont.)

## SERS Plan 2

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 24,479 | $\$$ | 734.3 | $\$$ |
| $6 / 30 / 2014$ | 22,950 | 670.0 | $2.8 \%$ |  |
| $6 / 30 / 2013$ | 21,760 | 622.8 | 29,998 |  |
| $6 / 30 / 2012$ | 20,846 | 594.0 | 28,620 |  |
| $6 / 30 / 2011$ | 20,784 | 591.4 | 28,494 |  |
| $6 / 30 / 2010$ | 20,358 | 576.0 | 28,453 |  |
| $6 / 30 / 2009$ | 20,197 | 567.0 | 28,293 |  |
| $6 / 30 / 2008$ | 19,264 | 522.4 | 28,072 |  |
| $6 / 30 / 2007$ | 17,767 | 471.4 | 27,118 |  |
| $9 / 30 / 2006$ | 18,464 | 469.5 | 26,531 | $0.4 \%$ |

## SERS Plan 3

| Valuation Date | Active Members | Annual Payroll in Millions |  | Average Annual Pay |  | Annualized \% Increase in Average Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6/30/2015 | 31,326 | \$ | 962.5 | \$ | 30,725 | 2.9\% |
| 6/30/2014 | 30,832 |  | 920.7 |  | 29,861 | 2.3\% |
| 6/30/2013 | 30,535 |  | 891.5 |  | 29,195 | 1.3\% |
| 6/30/2012 | 30,712 |  | 884.8 |  | 28,810 | 1.1\% |
| 6/30/2011 | 31,548 |  | 898.6 |  | 28,483 | 1.3\% |
| 6/30/2010 | 31,981 |  | 899.0 |  | 28,110 | 0.9\% |
| 6/30/2009 | 32,277 |  | 899.5 |  | 27,869 | 5.7\% |
| 6/30/2008 | 32,510 |  | 857.1 |  | 26,364 | 7.4\% |
| 6/30/2007 | 33,058 |  | 811.4 |  | 24,544 | 2.7\% |
| 9/30/2006 | 32,354 |  | 773.4 |  | 23,905 | 1.9\% |

PSERS Plan 2

| Valuation Date | Active Members | Annual Payroll in Millions |  | Average Annual Pay |  | Annualized \% Increase in Average Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6/30/2015 | 5,202 | \$ | 302.3 | \$ | 58,115 | 1.8\% |
| 6/30/2014 | 4,820 |  | 275.3 |  | 57,115 | 1.9\% |
| 6/30/2013 | 4,513 |  | 253.1 |  | 56,075 | 0.1\% |
| 6/30/2012 | 4,250 |  | 238.0 |  | 55,999 | 0.7\% |
| 6/30/2011 | 4,187 |  | 232.8 |  | 55,597 | 3.0\% |
| 6/30/2010 | 4,210 |  | 227.4 |  | 54,003 | 4.9\% |
| 6/30/2009 | 4,340 |  | 223.4 |  | 51,476 | 2.5\% |
| 6/30/2008 | 3,981 |  | 200.0 |  | 50,231 | 3.1\% |
| 6/30/2007 | 2,755 |  | 134.2 |  | 48,710 | (2.0)\% |
| 9/30/2006 | 2,073 |  | 103.1 |  | 49,714 | n/a |

## Schedule of Active Member Valuation Data (cont.)

## TRS Plan 1

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 1,353 | $\$$ | 107.7 | $\$$ |
| $6 / 30 / 2014$ | 1,824 | 143.3 | 79,603 |  |
| $6 / 30 / 2013$ | 2,393 | 183.2 | 78,549 |  |
| $6 / 30 / 2012$ | 3,019 | 228.5 | 76,549 |  |
| $6 / 30 / 2011$ | 3,740 | 284.2 | 75,681 |  |
| $6 / 30 / 2010$ | 4,591 | 344.0 | 75,994 |  |
| $6 / 30 / 2009$ | 5,204 | 388.8 | 74,930 | $(0.4) \%$ |
| $6 / 30 / 2008$ | 6,061 | 432.4 | 74,707 |  |
| $6 / 30 / 2007$ | 6,331 | 426.1 | 71,340 |  |
| $9 / 30 / 2006$ | 7,382 | 478.3 | 67,310 | $64 \%$ |

## TRS Plan 2

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 15,342 | $\$$ | 945.2 | $\$$ |
| $6 / 30 / 2014$ | 13,632 | 838.9 | $6,1 \%$ |  |
| $6 / 30 / 2013$ | 12,071 | 740.2 | 61,538 |  |
| $6 / 30 / 2012$ | 10,849 | 668.8 | 61,320 |  |
| $6 / 30 / 2011$ | 10,285 | 648.2 | 61,648 |  |
| $6 / 30 / 2010$ | 9,442 | 598.8 | 63,025 |  |
| $6 / 30 / 2009$ | 9,174 | 589.3 | 63,423 |  |
| $6 / 30 / 2008$ | 8,103 | 510.8 | 64,239 |  |
| $6 / 30 / 2007$ | 6,752 | 420.1 | 63,043 |  |
| $9 / 30 / 2006$ | 7,205 | 413.1 | 62,213 | $(0.6) \%$ |

TRS Plan 3

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 52,125 | $\$$ | $3,721.9$ | $\$$ |
| $6 / 30 / 2014$ | 51,837 | $3,611.5$ | 71,403 |  |
| $6 / 30 / 2013$ | 51,471 | $3,482.7$ | 69,670 |  |
| $6 / 30 / 2012$ | 51,489 | $3,408.1$ | 67,664 |  |
| $6 / 30 / 2011$ | 52,178 | $3,436.7$ | 66,191 |  |
| $6 / 30 / 2010$ | 52,292 | $3,366.7$ | 65,866 |  |
| $6 / 30 / 2009$ | 53,010 | $3,367.9$ | 64,382 |  |
| $6 / 30 / 2008$ | 52,360 | $3,110.6$ | 63,534 |  |
| $6 / 30 / 2007$ | 51,856 | $2,897.6$ | 59,408 |  |
| $9 / 30 / 2006$ | 53,371 | $2,812.0$ | 55,879 | $2.5 \%$ |

## Schedule of Active Member Valuation Data (cont.)

## LEOFF Plan 1

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 82 | $\$$ | 8.7 | $\$$ | $1.2 \%$ |
| $6 / 30 / 2014$ | 120 | 12.6 | 106,683 |  |  |
| $6 / 30 / 2013$ | 143 | 14.8 | 105,385 |  |  |
| $6 / 30 / 2012$ | 186 | 18.8 | 103,362 |  |  |
| $6 / 30 / 2011$ | 250 | 24.5 | 100,828 |  |  |
| $6 / 30 / 2010$ | 301 | 29.1 | 98,078 |  |  |
| $6 / 30 / 2009$ | 356 | 33.3 | 96,686 |  |  |
| $6 / 30 / 2008$ | 421 | 37.1 | 93,679 |  |  |
| $6 / 30 / 2007$ | 513 | 42.7 | 88,070 |  |  |
| $9 / 30 / 2006$ | 596 | 48.1 | 83,262 | $1.4 \%$ |  |

## LEOFF Plan 2

| Valuation Date | Active Members | Annual Payroll in Millions |  | Average Annual Pay |  | Annualized \% Increase in Average Pay |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6/30/2015 | 17,019 | \$ | 1,742.9 | \$ | 102,411 | 3.4\% |
| 6/30/2014 | 16,773 |  | 1,661.3 |  | 99,048 | 3.5\% |
| 6/30/2013 | 16,687 |  | 1,596.8 |  | 95,694 | 2.6\% |
| 6/30/2012 | 16,720 |  | 1,560.1 |  | 93,308 | 2.2\% |
| 6/30/2011 | 16,805 |  | 1,534.7 |  | 91,322 | 2.8\% |
| 6/30/2010 | 16,775 |  | 1,490.1 |  | 88,828 | 4.4\% |
| 6/30/2009 | 16,951 |  | 1,442.5 |  | 85,097 | 5.2\% |
| 6/30/2008 | 16,626 |  | 1,344.9 |  | 80,889 | 5.6\% |
| 6/30/2007 | 16,099 |  | 1,233.7 |  | 76,632 | 2.8\% |
| 9/30/2006 | 15,718 |  | 1,172.0 |  | 74,562 | 3.5\% |

## WSPRS Plan 1

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 560 | $\$$ | 48.5 | $\$$ |
| $6 / 30 / 2014$ | 609 | 51.6 | $8.0 \%$ |  |
| $6 / 30 / 2013$ | 657 | 53.5 | 84,535 |  |
| $6 / 30 / 2012$ | 712 | 57.1 | 81,804 |  |
| $6 / 30 / 2011$ | 767 | 61.3 | 80,263 |  |
| $6 / 30 / 2010$ | 806 | 64.6 | 79,983 |  |
| $6 / 30 / 2009$ | 830 | 66.5 | 80,197 |  |
| $6 / 30 / 2008$ | 851 | 65.3 | 80,115 |  |
| $6 / 30 / 2007$ | 885 | 63.6 | 76,751 |  |
| $9 / 30 / 2006$ | 906 | 63.1 | 71,907 | $(0.3) \%$ |

## Schedule of Active Member Valuation Data (cont.)

## WSPRS Plan 2

| Valuation Date | Active Members | Annual Payroll in Millions | Annualized \% Increase <br> in Average Pay |  |
| ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2015$ | 475 | $\$$ | 33.4 | $\$$ |
| $6 / 30 / 2014$ | 435 | 30.1 | 70,238 |  |
| $6 / 30 / 2013$ | 409 | 2.6 | 69,226 |  |
| $6 / 30 / 2012$ | 354 | 23.1 | 65,058 |  |
| $6 / 30 / 2011$ | 315 | 20.2 | 65,165 |  |
| $6 / 30 / 2010$ | 281 | 17.9 | 64,103 |  |
| $6 / 30 / 2009$ | 264 | 16.5 | 63,660 |  |
| $6 / 30 / 2008$ | 234 | 13.4 | 62,583 |  |
| $6 / 30 / 2007$ | 152 | 8.2 | 57,233 |  |
| $9 / 30 / 2006$ | 116 | 6.1 | 54,162 | $0.7 \%$ |

## JRS

| Valuation Date | Active Members | Annual Payroll in Millions |  | Average Annual Pay | Annualized \% Increase in Average Pay |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6/30/2015 | - | \$ | \$ | - | n/a |
| 6/30/2014 | - | - |  | - | n/a |
| 6/30/2013 | - | - |  | - | (100.0)\% |
| 6/30/2012 | 2 | 0.3 |  | 148,832 | (3.3)\% |
| 6/30/2011 | 3 | 0.5 |  | 153,962 | 1.4\% |
| 6/30/2010 | 5 | 0.8 |  | 151,908 | 0.7\% |
| 6/30/2009 | 9 | 1.4 |  | 150,870 | 6.0\% |
| 6/30/2008 | 10 | 1.4 |  | 142,328 | 5.9\% |
| 6/30/2007 | 11 | 1.5 |  | 134,386 | 2.2\% |
| 9/30/2006 | 11 | 1.4 |  | 131,436 | 3.0\% |

Averages are based on actual amounts, not rounded amounts.
Source: Washington State Office of the State Actuary

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

## PERS Plan 1

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 1,427 | \$ | 34,495,824 | 2,227 | \$ | 36,970,754 | 50,270 | \$ | 1,186,941,835 | \$ | 23,611 | 0.3\% |
| 6/30/2014 | 1,446 |  | 36,218,524 | 2,236 |  | 36,578,459 | 51,070 |  | 1,183,089,117 |  | 23,166 | 0.5\% |
| 6/30/2013 | 1,596 |  | 40,451,809 | 2,408 |  | 38,081,771 | 51,860 |  | 1,177,115,047 |  | 22,698 | 0.7\% |
| 6/30/2012 | 1,643 |  | 42,344,185 | 2,235 |  | 33,066,677 | 52,672 |  | 1,169,187,194 |  | 22,198 | 1.5\% |
| 6/30/2011 | 1,829 |  | 49,678,585 | 2,307 |  | 31,131,283 | 53,264 |  | 1,151,599,650 |  | 21,621 | 3.6\% |
| 6/30/2010 | 1,891 |  | 48,714,779 | 2,296 |  | 30,635,880 | 53,742 |  | 1,112,108,596 |  | 20,693 | 3.5\% |
| 6/30/2009 | 1,824 |  | 47,679,971 | 2,258 |  | 28,065,463 | 54,147 |  | 1,073,997,138 |  | 19,835 | 3.7\% |
| 6/30/2008 | 2,138 |  | 54,916,521 | 2,243 |  | 27,122,179 | 54,581 |  | 1,035,876,249 |  | 18,979 | 4.6\% |
| 6/30/2007 | 1,555 |  | 41,444,329 | 1,703 |  | 19,287,556 | 54,686 |  | 989,949,533 |  | 18,102 | 2.5\% |
| 9/30/2006 | 2,345 |  | 58,991,956 | 2,306 |  | 25,314,598 | 54,834 |  | 966,044,139 |  | 17,618 | 5.3\% |

PERS Plan 2


PERS Plan 3

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 581 | \$ | 6,525,449 | 29 | \$ | 179,408 | 3,186 | \$ | 31,459,343 | \$ | 9,874 | 26.8\% |
| 6/30/2014 | 527 |  | 5,973,884 | 32 |  | 179,191 | 2,634 |  | 24,801,688 |  | 9,416 | 33.6\% |
| 6/30/2013 | 414 |  | 4,231,693 | 25 |  | 175,440 | 2,139 |  | 18,566,461 |  | 8,680 | 31.1\% |
| 6/30/2012 | 377 |  | 3,768,015 | 15 |  | 95,645 | 1,750 |  | 14,165,571 |  | 8,095 | 36.6\% |
| 6/30/2011 | 289 |  | 2,750,573 | 15 |  | 115,610 | 1,388 |  | 10,366,918 |  | 7,469 | 36.8\% |
| 6/30/2010 | 211 |  | 1,847,618 | 17 |  | 105,335 | 1,114 |  | 7,575,590 |  | 6,800 | 33.1\% |
| 6/30/2009 | 188 |  | 1,431,296 | 11 |  | 68,324 | 920 |  | 5,691,504 |  | 6,186 | 34.6\% |
| 6/30/2008 | 153 |  | 973,585 | 9 |  | 39,824 | 743 |  | 4,227,474 |  | 5,690 | 31.2\% |
| 6/30/2007 | 120 |  | 767,458 | 7 |  | 36,995 | 599 |  | 3,222,482 |  | 5,380 | 29.4\% |
| 9/30/2006 | 149 |  | 788,987 | 6 |  | 28,021 | 486 |  | 2,490,907 |  | 5,125 | 48.2\% |

## Schedule of Retirees and Beneficiaries Added to and Removed from Rolls (cont.)

## SERS Plan 2

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 865 | \$ | 9,200,978 | 99 | \$ | 851,704 | 6,562 | \$ | 65,840,085 | \$ | 10,034 | 16.1\% |
| 6/30/2014 | 796 |  | 8,658,343 | 84 |  | 710,331 | 5,796 |  | 56,703,435 |  | 9,783 | 19.2\% |
| 6/30/2013 | 729 |  | 7,922,612 | 82 |  | 669,493 | 5,084 |  | 47,586,513 |  | 9,360 | 21.1\% |
| 6/30/2012 | 685 |  | 7,196,654 | 71 |  | 556,280 | 4,437 |  | 39,304,032 |  | 8,858 | 22.0\% |
| 6/30/2011 | 560 |  | 5,481,726 | 48 |  | 331,627 | 3,823 |  | 32,224,861 |  | 8,429 | 21.8\% |
| 6/30/2010 | 482 |  | 4,325,732 | 41 |  | 339,774 | 3,311 |  | 26,455,961 |  | 7,990 | 20.9\% |
| 6/30/2009 | 454 |  | 3,836,380 | 32 |  | 197,969 | 2,870 |  | 21,890,772 |  | 7,627 | 23.0\% |
| 6/30/2008 | 450 |  | 3,526,561 | 28 |  | 186,696 | 2,448 |  | 17,799,193 |  | 7,271 | 26.1\% |
| 6/30/2007 | 231 |  | 1,721,633 | 20 |  | 112,108 | 2,026 |  | 14,110,609 |  | 6,965 | 13.0\% |
| 9/30/2006 | 410 |  | 2,890,809 | 21 |  | 120,279 | 1,815 |  | 12,492,085 |  | 6,883 | 32.2\% |

## SERS Plan 3

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual <br> Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 981 | \$ | 6,027,951 | 56 | \$ | 226,130 | 5,750 | \$ | 31,328,571 | \$ | 5,448 | 24.4\% |
| 6/30/2014 | 875 |  | 5,235,885 | 45 |  | 185,272 | 4,825 |  | 25,178,188 |  | 5,218 | 28.1\% |
| 6/30/2013 | 803 |  | 4,385,800 | 22 |  | 91,177 | 3,995 |  | 19,657,323 |  | 4,920 | 31.1\% |
| 6/30/2012 | 636 |  | 3,285,871 | 27 |  | 105,484 | 3,214 |  | 14,992,908 |  | 4,665 | 28.5\% |
| 6/30/2011 | 553 |  | 3,038,825 | 21 |  | 73,455 | 2,605 |  | 11,667,747 |  | 4,479 | 37.2\% |
| 6/30/2010 | 332 |  | 1,614,718 | 18 |  | 51,140 | 2,073 |  | 8,504,426 |  | 4,102 | 25.6\% |
| 6/30/2009 | 346 |  | 1,552,969 | 12 |  | 36,518 | 1,759 |  | 6,768,866 |  | 3,848 | 31.9\% |
| 6/30/2008 | 325 |  | 1,370,967 | 15 |  | 57,309 | 1,425 |  | 5,130,021 |  | 3,600 | 37.5\% |
| 6/30/2007 | 178 |  | 695,857 | 6 |  | 14,025 | 1,115 |  | 3,730,124 |  | 3,345 | 22.7\% |
| 9/30/2006 | 246 |  | 830,604 | 8 |  | 24,025 | 943 |  | 3,040,090 |  | 3,224 | 39.5\% |

PSERS Plan $2^{1}$

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 19 | \$ | 141,388 | 1 | \$ | 4,020 | 80 | \$ | 466,218 | \$ | 5,828 | 43.2\% |
| 6/30/2014 | 19 |  | 137,777 | - |  | - | 62 |  | 325,492 |  | 5,250 | 76.0\% |
| 6/30/2013 | 16 |  | 98,050 | - |  | - | 43 |  | 184,938 |  | 4,301 | 116.0\% |
| 6/30/2012 | 12 |  | 46,142 | - |  | - | 27 |  | 85,628 |  | 3,171 | 117.6\% |
| 6/30/2011 | 8 |  | 25,844 | - |  | - | 15 |  | 39,355 |  | 2,624 | 192.3\% |
| 6/30/2010 | 5 |  | 10,383 | - |  | - | 7 |  | 13,645 |  | 1,924 | 339.7\% |
| 6/30/2009 | 1 |  | 2,409 | - |  | - | 2 |  | 3,062 |  | 1,531 | 368.9\% |
| 6/30/2008 | 1 |  | 653 | - |  | - | 1 |  | 653 |  | 653 | 0.0\% |
| 6/30/2007 | - |  | - | - |  | - | - |  | - |  | - | n/a |
| 9/30/2006 | - |  | - | - |  | - | - |  | - |  | - | n/a |

${ }^{1}$ PSERS 2 became effective July 1, 2006.

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls (cont.)

## TRS Plan 1


## TRS Plan 2

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual <br> Allowances | Number |  | Annual Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 452 | \$ | 11,891,498 | 41 | \$ | 703,305 | 4,305 | \$ | 92,291,775 | \$ | 21,438 | 15.4\% |
| 6/30/2014 | 493 |  | 12,353,083 | 44 |  | 699,410 | 3,894 |  | 79,974,743 |  | 20,538 | 20.0\% |
| 6/30/2013 | 422 |  | 10,037,156 | 37 |  | 626,458 | 3,445 |  | 66,622,927 |  | 19,339 | 19.6\% |
| 6/30/2012 | 424 |  | 9,371,702 | 21 |  | 336,553 | 3,060 |  | 55,682,494 |  | 18,197 | 20.8\% |
| 6/30/2011 | 362 |  | 7,470,573 | 25 |  | 307,667 | 2,657 |  | 46,085,043 |  | 17,345 | 21.3\% |
| 6/30/2010 | 249 |  | 5,208,999 | 33 |  | 383,886 | 2,320 |  | 37,984,977 |  | 16,373 | 17.7\% |
| 6/30/2009 | 246 |  | 4,939,050 | 21 |  | 265,215 | 2,104 |  | 32,273,082 |  | 15,339 | 20.2\% |
| 6/30/2008 | 244 |  | 4,076,287 | 29 |  | 323,867 | 1,879 |  | 26,844,925 |  | 14,287 | 19.5\% |
| 6/30/2007 | 105 |  | 1,426,931 | 15 |  | 141,168 | 1,664 |  | 22,470,949 |  | 13,504 | 6.2\% |
| 9/30/2006 | 239 |  | 3,646,802 | 16 |  | 140,601 | 1,574 |  | 21,157,013 |  | 13,442 | 23.5\% |

## TRS Plan 3

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 1,411 | \$ | 20,685,113 | 52 | \$ | 518,497 | 7,453 | \$ | 93,089,105 | \$ | 12,490 | 29.4\% |
| 6/30/2014 | 1,271 |  | 18,346,307 | 40 |  | 361,104 | 6,094 |  | 71,957,258 |  | 11,808 | 36.5\% |
| 6/30/2013 | 1,083 |  | 13,777,247 | 24 |  | 234,999 | 4,863 |  | 52,704,816 |  | 10,838 | 38.0\% |
| 6/30/2012 | 896 |  | 10,668,293 | 26 |  | 207,788 | 3,804 |  | 38,191,899 |  | 10,040 | 39.3\% |
| 6/30/2011 | 714 |  | 8,168,048 | 15 |  | 132,216 | 2,934 |  | 27,425,422 |  | 9,347 | 44.5\% |
| 6/30/2010 | 454 |  | 4,632,283 | 10 |  | 73,282 | 2,235 |  | 18,983,833 |  | 8,494 | 34.9\% |
| 6/30/2009 | 408 |  | 4,058,520 | 9 |  | 60,319 | 1,791 |  | 14,073,479 |  | 7,858 | 43.2\% |
| 6/30/2008 | 360 |  | 3,056,652 | 11 |  | 78,741 | 1,392 |  | 9,828,264 |  | 7,061 | 47.1\% |
| 6/30/2007 | 115 |  | 826,838 | 5 |  | 17,533 | 1,043 |  | 6,680,207 |  | 6,405 | 13.9\% |
| 9/30/2006 | 233 |  | 1,707,380 | 6 |  | 34,323 | 933 |  | 5,863,113 |  | 6,284 | 44.0\% |

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls (cont.)

## LEOFF Plan 1

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual <br> Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 153 | \$ | 8,756,563 | 251 | \$ | 10,586,867 | 7,507 | \$ | 361,094,205 | \$ | 48,101 | 1.4\% |
| 6/30/2014 | 124 |  | 6,809,466 | 248 |  | 10,922,714 | 7,605 |  | 356,280,207 |  | 46,848 | 0.0\% |
| 6/30/2013 | 146 |  | 7,890,561 | 262 |  | 10,485,897 | 7,729 |  | 356,229,923 |  | 46,090 | 1.7\% |
| 6/30/2012 | 162 |  | 9,325,170 | 249 |  | 9,732,437 | 7,845 |  | 350,199,616 |  | 44,640 | 3.0\% |
| 6/30/2011 | 136 |  | 7,331,503 | 212 |  | 8,121,870 | 7,932 |  | 340,160,704 |  | 42,885 | 0.5\% |
| 6/30/2010 | 167 |  | 9,065,821 | 246 |  | 9,545,410 | 8,008 |  | 338,503,613 |  | 42,271 | 0.3\% |
| 6/30/2009 | 156 |  | 8,226,656 | 203 |  | 7,267,042 | 8,087 |  | 337,505,287 |  | 41,734 | 4.7\% |
| 6/30/2008 | 189 |  | 9,377,706 | 216 |  | 7,617,139 | 8,134 |  | 322,365,013 |  | 39,632 | 4.3\% |
| 6/30/2007 | 153 |  | 7,238,334 | 164 |  | 5,380,231 | 8,161 |  | 309,181,019 |  | 37,885 | 4.2\% |
| 9/30/2006 | 229 |  | 10,517,551 | 206 |  | 6,565,445 | 8,172 |  | 296,662,837 |  | 36,302 | 4.2\% |

## LEOFF Plan 2

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  |  | AverageAnnual Allowance | \% Increase in Annual Allowance |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual <br> Allowances |  |  |  |
| 6/30/2015 | 497 | \$ | 25,745,170 | 22 | \$ | 891,857 | 3,710 | \$ | 157,094,929 | \$ | 42,344 | 20.4\% |
| 6/30/2014 | 478 |  | 23,448,749 | 25 |  | 779,746 | 3,235 |  | 130,428,517 |  | 40,318 | 24.0\% |
| 6/30/2013 | 457 |  | 21,512,439 | 19 |  | 571,580 | 2,782 |  | 105,193,996 |  | 37,812 | 28.5\% |
| 6/30/2012 | 355 |  | 16,447,618 | 26 |  | 705,284 | 2,344 |  | 81,874,896 |  | 34,930 | 25.1\% |
| 6/30/2011 | 389 |  | 15,718,562 | 13 |  | 333,059 | 2,015 |  | 65,459,659 |  | 32,486 | 33.8\% |
| 6/30/2010 | 285 |  | 10,278,954 | 13 |  | 332,332 | 1,639 |  | 48,926,257 |  | 29,851 | 29.2\% |
| 6/30/2009 | 243 |  | 8,478,268 | 10 |  | 216,179 | 1,367 |  | 37,876,404 |  | 27,708 | 31.0\% |
| 6/30/2008 | 227 |  | 6,985,801 | 17 |  | 279,908 | 1,134 |  | 28,904,921 |  | 25,489 | 33.7\% |
| 6/30/2007 | 153 |  | 4,353,299 | 8 |  | 144,930 | 924 |  | 21,611,590 |  | 23,389 | 24.3\% |
| 9/30/2006 | 211 |  | 5,655,854 | 6 |  | 89,270 | 779 |  | 17,388,315 |  | 22,321 | 51.4\% |


| WSPRS Plan 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls — End of Year |  |  |  |  |  |
| Year Ended | Number |  | Annual <br> Allowances | Number |  | Annual <br> Allowances | Number |  | Annual Allowances |  | Average Annual Allowance | \% Increase in Annual Allowance |
| 6/30/2015 | 60 | \$ | 2,780,816 | 23 | \$ | 781,775 | 1,033 | \$ | 50,674,128 | \$ | 49,055 | 5.9\% |
| 6/30/2014 | 51 |  | 2,304,665 | 19 |  | 597,779 | 996 |  | 47,829,447 |  | 48,022 | 6.5\% |
| 6/30/2013 | 67 |  | 3,124,867 | 18 |  | 587,613 | 964 |  | 44,897,586 |  | 46,574 | 9.1\% |
| 6/30/2012 | 59 |  | 2,674,231 | 19 |  | 715,514 | 915 |  | 41,147,922 |  | 44,970 | 6.6\% |
| 6/30/2011 | 42 |  | 1,918,898 | 18 |  | 476,475 | 875 |  | 38,597,849 |  | 44,112 | 5.1\% |
| 6/30/2010 | 33 |  | 1,549,594 | 16 |  | 489,562 | 851 |  | 36,718,045 |  | 43,147 | 6.0\% |
| 6/30/2009 | 15 |  | 710,502 | 12 |  | 377,080 | 834 |  | 34,636,899 |  | 41,531 | 4.0\% |
| 6/30/2008 | 28 |  | 1,152,618 | 18 |  | 541,668 | 831 |  | 33,303,079 |  | 40,076 | 4.8\% |
| 6/30/2007 | 22 |  | 801,594 | 9 |  | 182,796 | 821 |  | 31,779,147 |  | 38,708 | 2.1\% |
| 9/30/2006 | 28 |  | 1,101,085 | 12 |  | 321,334 | 808 |  | 31,134,976 |  | 38,533 | 6.3\% |

## Schedule of Retirees and Beneficiaries Added to and Removed from Rolls (cont.)

| JRS |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

## JRF

|  | Added to Rolls |  |  | Removed from Rolls |  |  | Rolls - End of Year |  |  | Average Annual <br> Allowance |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended | Number |  | Annual Allowances | Number |  | Annual Allowances | Number |  | Annual <br> Allowances |  |  | \% Increase in Annual Allowance |
| 6/30/2015 | - | \$ | - | - | \$ | - | 12 | \$ | 444,282 | \$ | 37,024 | 0.0\% |
| 6/30/2014 | - |  | - | - |  | - | 12 |  | 444,282 |  | 37,024 | 0.0\% |
| 6/30/2013 | - |  | - | - |  | - | 12 |  | 444,282 |  | 37,024 | (7.7)\% |
| 6/30/2012 | - |  | - | 1 |  | 18,329 | 12 |  | 481,389 |  | 40,116 | (3.7)\% |
| 6/30/2011 | - |  | - | - |  | - | 13 |  | 499,719 |  | 38,440 | 0.0\% |
| 6/30/2010 | - |  | - | - |  | - | 13 |  | 499,719 |  | 38,440 | 0.0\% |
| 6/30/2009 | - |  | - | - |  | - | 13 |  | 499,719 |  | 38,440 | 0.0\% |
| 6/30/2008 | - |  | - | 2 |  | - | 13 |  | 499,719 |  | 38,440 | (13.6)\% |
| 6/30/2007 | - |  | - | - |  | 75,233 | 15 |  | 578,135 |  | 38,542 | 0.0\% |
| 9/30/2006 | 1 |  | 18,033 | 2 |  | 75,234 | 15 |  | 578,135 |  | 38,542 | (9.0)\% |

[^16]
## Solvency Tests

## PERS Plan 1

Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions |  | (2) Inactive Member Liability |  | (3) Excess Accrued Liability |  | $(1+2+3)$ <br> Total Accrued Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ 513.7 | \$ | 11,439.9 | \$ | 599.9 | \$ | 12,553.5 | \$ | 7,314.9 | 100\% | 59\% | 0\% |
| 6/30/2014 | 589.2 |  | 11,387.8 |  | 743.3 |  | 12,720.4 |  | 7,761.5 | 100\% | 63\% | 0\% |
| 6/30/2013 | 662.6 |  | 11,371.1 |  | 613.4 |  | 12,647.1 |  | 8,053.1 | 100\% | 65\% | 0\% |
| 6/30/2012 | 740.8 |  | 10,685.6 |  | 707.0 |  | 12,133.4 |  | 8,520.6 | 100\% | 73\% | 0\% |
| 6/30/2011 | 818.7 |  | 10,677.5 |  | 852.1 |  | 12,348.4 |  | 8,883.4 | 100\% | 76\% | 0\% |
| 6/30/2010 | 912.6 |  | 10,232.0 |  | 1,096.0 |  | 12,240.7 |  | 9,293.0 | 100\% | 82\% | 0\% |
| 6/30/2009 | 989.9 |  | 11,269.4 |  | 1,703.2 |  | 13,962.6 |  | 9,775.6 | 100\% | 78\% | 0\% |
| 6/30/2008 | 1,055.8 |  | 10,963.4 |  | 1,881.7 |  | 13,901.0 |  | 9,852.9 | 100\% | 80\% | 0\% |
| 6/30/2007 | 1,120.4 |  | 10,575.9 |  | 2,044.2 |  | 13,740.5 |  | 9,715.5 | 100\% | 81\% | 0\% |
| 9/30/2006 | 1,186.4 |  | 9,473.0 |  | 2,470.1 |  | 13,129.4 |  | 9,591.0 | 100\% | 89\% | 0\% |

PERS Plan 2/3
Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions |  | (2) Inactive Member Liability |  | (3) Excess Accrued Liability |  | $(1+2+3)$ <br> Total Accrued Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ 4,596.6 | \$ | 11,541.9 | \$ | 12,153.8 | \$ | 28,282.3 | \$ | 28,292.3 | 100\% | 100\% | 100\% |
| 6/30/2014 | 4,357.1 |  | 9,925.2 |  | 12,104.0 |  | 26,386.3 |  | 26,386.3 | 100\% | 100\% | 100\% |
| 6/30/2013 | 4,121.6 |  | 8,388.8 |  | 11,824.2 |  | 24,334.6 |  | 24,334.6 | 100\% | 100\% | 100\% |
| 6/30/2012 | 3,878.2 |  | 6,710.3 |  | 12,064.0 |  | 22,652.6 |  | 22,652.6 | 100\% | 100\% | 100\% |
| 6/30/2011 | 3,605.7 |  | 5,756.8 |  | 11,634.2 |  | 20,996.7 |  | 20,996.7 | 100\% | 100\% | 100\% |
| 6/30/2010 | 3,388.0 |  | 4,753.4 |  | 11,332.7 |  | 19,474.1 |  | 19,474.1 | 100\% | 100\% | 100\% |
| 6/30/2009 | 3,132.0 |  | 4,038.0 |  | 11,090.4 |  | 18,260.4 |  | 18,260.4 | 100\% | 100\% | 100\% |
| 6/30/2008 | 2,760.9 |  | 3,447.1 |  | 10,484.7 |  | 16,692.7 |  | 16,692.7 | 100\% | 100\% | 100\% |
| 6/30/2007 | 2,464.6 |  | 2,966.5 |  | 9,456.7 |  | 14,887.9 |  | 14,887.9 | 100\% | 100\% | 100\% |
| 9/30/2006 | 2,294.7 |  | 2,470.0 |  | 8,764.2 |  | 13,528.9 |  | 13,528.9 | 100\% | 100\% | 100\% |

SERS Plan 2/3
Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions | (2) Inactive Member Liability |  | (3) Excess <br> Accrued Liability |  | (1+2+3) <br> otal Accrued <br> Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ 347.4 | \$ 1,751.4 | \$ | 1,801.8 | \$ | 3,900.6 | \$ | 3,900.6 | 100\% | 100\% | 100\% |
| 6/30/2014 | 328.0 | 1,492.9 |  | 1,803.0 |  | 3,623.8 |  | 3,623.8 | 100\% | 100\% | 100\% |
| 6/30/2013 | 309.2 | 1,267.1 |  | 1,758.3 |  | 3,334.6 |  | 3,334.6 | 100\% | 100\% | 100\% |
| 6/30/2012 | 295.3 | 1,018.0 |  | 1,787.0 |  | 3,100.3 |  | 3,100.3 | 100\% | 100\% | 100\% |
| 6/30/2011 | 279.8 | 862.1 |  | 1,730.3 |  | 2,872.1 |  | 2,872.1 | 100\% | 100\% | 100\% |
| 6/30/2010 | 266.2 | 713.8 |  | 1,684.1 |  | 2,664.1 |  | 2,664.1 | 100\% | 100\% | 100\% |
| 6/30/2009 | 251.5 | 613.7 |  | 1,637.9 |  | 2,503.2 |  | 2,503.2 | 100\% | 100\% | 100\% |
| 6/30/2008 | 226.5 | 523.7 |  | 1,552.4 |  | 2,302.6 |  | 2,302.6 | 100\% | 100\% | 100\% |
| 6/30/2007 | 207.1 | 431.4 |  | 1,494.9 |  | 2,133.4 |  | 2,133.4 | 100\% | 100\% | 100\% |
| 9/30/2006 | 188.7 | 350.1 |  | 1,395.5 |  | 1,934.3 |  | 1,934.3 | 100\% | 100\% | 100\% |

## Solvency Tests (cont.)

PSERS Plan 2
Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess <br> Accrued Liability | $(1+2+3)$ <br> Total Accrued Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess <br> Accrued Liability |
| 6/30/2015 | \$ 128.4 | \$ 29.5 | \$ 180.1 | \$ 337.9 | \$ | 337.9 | 100\% | 100\% | 100\% |
| 6/30/2014 | 109.5 | 21.5 | 147.2 | 278.2 |  | 278.2 | 100\% | 100\% | 100\% |
| 6/30/2013 | 92.5 | 14.7 | 117.1 | 224.2 |  | 224.2 | 100\% | 100\% | 100\% |
| 6/30/2012 | 76.5 | 9.2 | 94.8 | 180.5 |  | 180.5 | 100\% | 100\% | 100\% |
| 6/30/2011 | 62.0 | 6.1 | 72.6 | 140.7 |  | 140.7 | 100\% | 100\% | 100\% |
| 6/30/2010 | 46.9 | 4.2 | 51.7 | 102.9 |  | 102.9 | 100\% | 100\% | 100\% |
| 6/30/2009 | 32.4 | 2.0 | 34.8 | 69.2 |  | 69.2 | 100\% | 100\% | 100\% |
| 6/30/2008 | 18.1 | 0.9 | 19.7 | 38.7 |  | 38.7 | 100\% | 100\% | 100\% |
| 6/30/2007 | 6.7 | 0.2 | 6.9 | 13.7 |  | 13.7 | 100\% | 100\% | 100\% |
| 9/30/2006 | 0.6 | 0.0 | 0.5 | 1.1 |  | 1.1 | 100\% | 100\% | 100\% |

## TRS Plan 1

Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions | (2) Inactive Member Liability |  | (3) Excess Accrued Liability |  | $\begin{array}{r} (1+2+3) \\ \text { Total Accrued } \\ \text { Liability } \end{array}$ |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ 277.0 | \$ 8,562.6 | \$ | 268.0 | \$ | 9,107.5 | \$ | 5,870.5 | 100\% | 65\% | 0\% |
| 6/30/2014 | 347.4 | 8,530.4 |  | 372.3 |  | 9,250.1 |  | 6,352.8 | 100\% | 70\% | 0\% |
| 6/30/2013 | 433.7 | 8,511.5 |  | 441.0 |  | 9,386.1 |  | 6,717.1 | 100\% | 74\% | 0\% |
| 6/30/2012 | 509.9 | 7,952.4 |  | 534.4 |  | 8,996.7 |  | 7,144.5 | 100\% | 83\% | 0\% |
| 6/30/2011 | 598.1 | 7,934.2 |  | 662.4 |  | 9,194.7 |  | 7,485.0 | 100\% | 87\% | 0\% |
| 6/30/2010 | 663.6 | 7,586.5 |  | 870.0 |  | 9,120.0 |  | 7,791.3 | 100\% | 94\% | 0\% |
| 6/30/2009 | 725.6 | 8,821.7 |  | 1,264.8 |  | 10,812.1 |  | 8,146.2 | 100\% | 84\% | 0\% |
| 6/30/2008 | 790.2 | 8,564.6 |  | 1,399.1 |  | 10,753.9 |  | 8,262.3 | 100\% | 87\% | 0\% |
| 6/30/2007 | 766.4 | 8,670.1 |  | 1,389.0 |  | 10,825.6 |  | 8,302.3 | 100\% | 87\% | 0\% |
| 9/30/2006 | 839.3 | 7,831.8 |  | 1,687.5 |  | 10,358.6 |  | 8,275.5 | 100\% | 95\% | 0\% |

TRS Plan 2/3
Dollars in Millions

|  | Accrued Liabilities (Entry Age Cost Method) |  |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

[^17]
## Solvency Tests (cont.)

## LEOFF Plan 1

Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess <br> Accrued Liability | $(1+2+3)$ <br> Total Accrued Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ 16.8 | \$ 4,212.1 | \$ 78.2 | \$ 4,307.1 | \$ | 5,403.6 | 100\% | 100\% | 100\% |
| 6/30/2014 | 23.4 | 4,188.6 | 110.6 | 4,322.6 |  | 5,499.3 | 100\% | 100\% | 100\% |
| 6/30/2013 | 27.1 | 4,254.5 | 119.4 | 4,401.0 |  | 5,516.4 | 100\% | 100\% | 100\% |
| 6/30/2012 | 33.5 | 3,945.9 | 134.5 | 4,113.9 |  | 5,561.6 | 100\% | 100\% | 100\% |
| 6/30/2011 | 43.3 | 3,898.6 | 196.2 | 4,138.0 |  | 5,565.3 | 100\% | 100\% | 100\% |
| 6/30/2010 | 49.5 | 4,090.6 | 245.9 | 4,386.0 |  | 5,560.9 | 100\% | 100\% | 100\% |
| 6/30/2009 | 55.4 | 4,149.8 | 281.2 | 4,486.5 |  | 5,612.1 | 100\% | 100\% | 100\% |
| 6/30/2008 | 62.3 | 3,997.4 | 308.0 | 4,367.7 |  | 5,592.5 | 100\% | 100\% | 100\% |
| 6/30/2007 | 72.4 | 3,916.3 | 351.5 | 4,340.2 |  | 5,297.7 | 100\% | 100\% | 100\% |
| 9/30/2006 | 80.7 | 3,826.1 | 402.1 | 4,309.0 |  | 5,017.8 | 100\% | 100\% | 100\% |

## LEOFF Plan 2

Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions |  | (2) Inactive Member Liability |  | (3) Excess <br> Accrued Liability |  | (1+2+3) <br> otal Accrued <br> Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ 2,311.3 | \$ | 2,746.8 | \$ | 4,262.0 | \$ | 9,320.2 | \$ | 9,320.2 | 100\% | 100\% | 100\% |
| 6/30/2014 | 2,179.6 |  | 2,287.3 |  | 4,171.1 |  | 8,637.9 |  | 8,637.9 | 100\% | 100\% | 100\% |
| 6/30/2013 | 2,054.4 |  | 1,862.4 |  | 3,945.5 |  | 7,862.3 |  | 7,862.3 | 100\% | 100\% | 100\% |
| 6/30/2012 | 1,925.9 |  | 1,427.7 |  | 3,868.3 |  | 7,221.9 |  | 7,221.9 | 100\% | 100\% | 100\% |
| 6/30/2011 | 1,782.2 |  | 1,166.1 |  | 3,672.3 |  | 6,620.7 |  | 6,620.7 | 100\% | 100\% | 100\% |
| 6/30/2010 | 1,615.0 |  | 924.7 |  | 3,503.0 |  | 6,042.7 |  | 6,042.7 | 100\% | 100\% | 100\% |
| 6/30/2009 | 1,479.5 |  | 682.5 |  | 3,402.1 |  | 5,564.2 |  | 5,564.2 | 100\% | 100\% | 100\% |
| 6/30/2008 | 1,319.7 |  | 547.5 |  | 3,185.5 |  | 5,052.7 |  | 5,052.7 | 100\% | 100\% | 100\% |
| 6/30/2007 | 1,178.3 |  | 451.7 |  | 2,729.6 |  | 4,359.6 |  | 4,359.6 | 100\% | 100\% | 100\% |
| 9/30/2006 | 1,087.8 |  | 355.6 |  | 2,400.3 |  | 3,843.8 |  | 3,843.8 | 100\% | 100\% | 100\% |

WSPRS Plan $1 / 2$
Dollars in Millions

|  | Accrued Liabilities (Entry Age Cost Method) |  |  | Portion of Accrued Liabilities Covered by Assets |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

Solvency Tests (cont.)

## JRS ${ }^{1}$

Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date |  | ctive |  | (2) Inactive Member Liability |  | (3) Excess Accrued Liability |  | (1+2+3) <br> Total Accrued Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ | - | \$ | 100.3 | \$ | - | \$ | 100.3 | \$ | 6.3 | n/a | 6\% | n/a |
| 6/30/2014 |  | - |  | 105.0 |  | - |  | 105.0 |  | 5.0 | n/a | 5\% | n/a |
| 6/30/2013 |  | - |  | 108.2 |  | - |  | 108.2 |  | 3.9 | n/a | 4\% | n/a |
| 6/30/2012 |  | 1.0 |  | 100.4 |  | 2.5 |  | 103.9 |  | 3.5 | 100\% | 2\% | 0\% |
| 6/30/2011 |  | 1.5 |  | 104.3 |  | 3.6 |  | 109.3 |  | 5.1 | 100\% | 3\% | 0\% |
| 6/30/2010 |  | 2.2 |  | 78.5 |  | 3.1 |  | 83.8 |  | 3.8 | 100\% | 2\% | 0\% |
| 6/30/2009 |  | 3.7 |  | 76.1 |  | 9.5 |  | 89.3 |  | 1.8 | 50\% | 0\% | 0\% |
| 6/30/2008 |  | 3.7 |  | 78.2 |  | 9.7 |  | 91.5 |  | 1.0 | 26\% | 0\% | 0\% |
| 6/30/2007 |  | 3.7 |  | 75.3 |  | 6.0 |  | 85.0 |  | 0.5 | 15\% | 0\% | 0\% |
| 9/30/2006 |  | 3.5 |  | 78.7 |  | 5.8 |  | 88.0 |  | 0.3 | 7\% | 0\% | 0\% |

## $J^{\prime}{ }^{1}$

Dollars in Millions

| Accrued Liabilities (Entry Age Cost Method) |  |  |  |  | Portion of Accrued Liabilities Covered by Assets |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability | $(1+2+3)$ <br> Total Accrued Liability |  | Valuation Assets | (1) Active Member Contributions | (2) Inactive Member Liability | (3) Excess Accrued Liability |
| 6/30/2015 | \$ | \$ 3.1 | \$ | \$ 3.1 | \$ | 0.5 | n/a | 16\% | n/a |
| 6/30/2014 | - | 3.3 | - | 3.3 |  | 1.0 | n/a | 29\% | n/a |
| 6/30/2013 | - | 3.5 | - | 3.5 |  | 1.4 | n/a | 40\% | n/a |
| 6/30/2012 | - | 3.6 | - | 3.6 |  | 1.9 | n/a | 52\% | n/a |
| 6/30/2011 | - | 3.9 | - | 3.9 |  | 2.3 | n/a | 61\% | n/a |
| 6/30/2010 | - | 3.2 | - | 3.2 |  | 2.8 | n/a | 87\% | n/a |
| 6/30/2009 | - | 3.4 | - | 3.4 |  | 3.3 | n/a | 97\% | n/a |
| 6/30/2008 | - | 3.5 | - | 3.5 |  | 3.6 | n/a | 100\% | n/a |
| 6/30/2007 | - | 3.9 | - | 3.9 |  | 4.0 | n/a | 100\% | n/a |
| 9/30/2006 | - | 4.0 | - | 4.0 |  | 4.1 | n/a | 100\% | n/a |

${ }^{1}$ JRS and JRF are financed on a pay-as-you-go basis from a combination of investment earnings and funding from the state.
Totals might not agree due to rounding, and percentages are based on actual, not rounded, totals.
PERS Plan $2 / 3$, SERS Plan $2 / 3$, PSERS Plan 2, TRS Plan 2/3, LEOFF Plan 2 and WSPRS Plan $1 / 2$ : The actuarial liability (AAL) presented in these charts
reflects the actual actuarial valuation method (Aggregate Cost) used to calculate the annual required contributions for these plans. This Aggregate Actuarial Cost Method doesn't separately amortize unfunded actuarial liabilities and, by definition, sets the accrued liabilities equal to the assets. Therefore, the funded status is always $100 \%$. These AAL amounts differ from those presented in the schedules of funded status and funding progress included within the Actuarial Section, where a different valuation method (Entry Age) is used as a surrogate.

Source: Office of the State Actuary

## Analysis of Selected Experience

PERS Plan 1: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015
Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

| \$ Gain (or Loss) for Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |
| Investment Gains ${ }^{1}$ | \$ | (447.8) | \$ | (308.7) | \$ | (417.4) | \$ | (340.4) | \$ | (397.7) | \$ | (668.0) | \$ | (298.2) | \$ | 151.6 | \$ | 186.0 | \$ | 5.6 |
| Salary Gains |  | 10.5 |  | (1.4) |  | 25.8 |  | 47.9 |  | 59.9 |  | 54.2 |  | 10.9 |  | (59.2) |  | 30.7 |  | (7.6) |
| Termination of Employment |  | 0.2 |  | (0.3) |  | 1.1 |  | 0.5 |  | 0.1 |  | 1.2 |  | (0.2) |  | (0.4) |  | 7.2 |  | 6.1 |
| Return to Work from Terminated Status |  | (2.6) |  | (3.9) |  | (2.8) |  | (3.2) |  | (6.4) |  | (8.0) |  | (9.7) |  | (49.1) |  | (14.4) |  | (25.1) |
| Gain (or Loss) During Year from Selected Experience | \$ | (439.7) | \$ | (314.3) | \$ | (393.3) | \$ | (295.2) | \$ | (344.1) | \$ | (620.6) | \$ | (297.2) | \$ | 42.9 | \$ | 209.5 | \$ | (21.0) |

PERS Plan 2/3: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015
Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

| \$ Gain (or Loss) for Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |
| Investment Gains ${ }^{1}$ | \$ | (591.8) | \$ | (323.2) | \$ | (302.6) | \$ | (295.6) | \$ | (404.3) | \$ | (619.2) | \$ | (134.3) | \$ | 273.4 | \$ | 327.6 | \$ | 97.0 |
| Salary Gains |  | 331.5 |  | 60.7 |  | 481.1 |  | 663.9 |  | 731.7 |  | 577.8 |  | 185.9 |  | (326.1) |  | 124.2 |  | 12.1 |
| Termination of Employment |  | 192.2 |  | 116.6 |  | 131.8 |  | 129.3 |  | 118.3 |  | 18.0 |  | 21.1 |  | 47.8 |  | 131.1 |  | 155.5 |
| Return to Work from Terminated |  | (68.1) |  | (64.7) |  | (66.3) |  | (58.3) |  | (44.1) |  | (50.2) |  | (47.8) |  | (97.1) |  | (86.8) |  | (92.6) |
| Gain (or Loss) | \$ | (136.2) | \$ | (210.6) | \$ | 244.0 | \$ | 439.3 | \$ | 401.6 | \$ | (73.6) | \$ | 24.9 | \$ | (102.0) | \$ | 496.1 | \$ | 172.0 |
| During Year from Selected Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

SERS Plan 2/3: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015
Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

| \$ Gain (or Loss) for Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |
| Investment Gains ${ }^{1}$ | \$ | (96.2) | \$ | (64.0) | \$ | (66.4) | \$ | (69.6) | \$ | (80.5) | \$ | (115.1) | \$ | (33.2) | \$ | 39.1 | \$ | 46.3 | \$ | 11.3 |
| Salary Gains |  | (7.1) |  | 9.1 |  | 53.1 |  | 94.1 |  | 75.1 |  | 84.5 |  | (27.4) |  | (27.5) |  | 9.6 |  | 23.8 |
| Termination of Employment |  | 30.9 |  | 27.0 |  | 18.0 |  | 20.3 |  | 8.3 |  | 3.1 |  | 5.8 |  | 11.0 |  | 16.1 |  | 11.7 |
| Return to Work from Terminated |  | (8.9) |  | (6.5) |  | (4.7) |  | (3.5) |  | (5.2) |  | (5.5) |  | (6.2) |  | (8.4) |  | (74.3) |  | (27.1) |
| Status <br> Gain (or Loss) | \$ | (81.3) | \$ | (34.4) | \$ | - | \$ | 41.3 | \$ | (2.3) | \$ | (33.0) | \$ | (61.0) | \$ | 14.2 | \$ | (2.3) | \$ | 19.7 |
| During Year from Selected Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^18]
## Analysis of Selected Experience (cont.)

PSERS Plan 2: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015
Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

${ }^{2}$ PSERS Plan 2 became effective July 1, 2006.

TRS Plan 1: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015
Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

| \$ Gain (or Loss) for Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |
| Investment Gains ${ }^{1}$ | \$ | (414.5) | \$ | (311.3) | \$ | (324.0) | \$ | (262.3) | \$ | (247.3) | \$ | (502.1) | \$ | (287.8) | \$ | 26.1 | \$ | 24.9 | \$ | (111.7) |
| Salary Gains |  | 11.4 |  | 4.4 |  | 20.6 |  | 45.5 |  | 36.5 |  | 60.7 |  | (17.4) |  | (28.9) |  | 4.3 |  | 45.6 |
| Termination of Employment |  | (0.3) |  | (0.2) |  | 0.3 |  | (0.3) |  | 0.2 |  | 0.9 |  | 1.5 |  | 0.7 |  | (7.5) |  | 0.8 |
| Return to Work from Terminated Status |  | (1.0) |  | (0.9) |  | (1.6) |  | (2.2) |  | (4.4) |  | (7.3) |  | (6.0) |  | (23.6) |  | (6.8) |  | (22.9) |
| Gain (or Loss) During Year from Selected Experience | \$ | (404.4) | \$ | (308.0) | \$ | (304.7) | \$ | (219.3) | \$ | (215.0) | \$ | (447.8) | \$ | (309.7) | \$ | (25.7) | \$ | 14.9 | \$ | (88.2) |

TRS Plan 2/3: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015
Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

| \$ Gain (or Loss) for Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |
| Investment Gains ${ }^{1}$ | \$ | (200.8) | \$ | (120.4) | \$ | (122.3) | \$ | (142.0) | \$ | (180.6) | \$ | (266.8) | \$ | (120.1) | \$ | 66.8 | \$ | 88.5 | \$ | (1.7) |
| Salary Gains |  | 234.4 |  | 148.9 |  | 226.6 |  | 389.0 |  | 252.6 |  | 341.3 |  | (67.3) |  | (52.7) |  | 20.6 |  | 70.1 |
| Termination of Employment |  | 201.4 |  | 152.6 |  | 120.7 |  | 130.0 |  | 85.5 |  | 92.9 |  | 71.7 |  | 54.8 |  | 56.5 |  | 33.6 |
| Return to Work from Terminated |  | (94.3) |  | (78.0) |  | (56.5) |  | (39.9) |  | (43.7) |  | (37.5) |  | (63.0) |  | (85.4) |  | (139.7) |  | (43.1) |
| Status <br> Gain (or Loss) | \$ | 140.7 | \$ | 103.1 | \$ | 168.5 | \$ | 337.1 | \$ | 113.8 | \$ | 129.9 | \$ | (178.7) | \$ | (16.5) | \$ | 25.9 | \$ | 58.9 |
| During Year from Selected Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

${ }^{1}$ Actuarial value of assets

## Analysis of Selected Experience (cont.)

LEOFF Plan 1: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015
Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions


LEOFF Plan 2: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015 Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

| \$ Gain (or Loss) for Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |
| Investment Gains ${ }^{1}$ | \$ | (43.6) | \$ | 88.0 | \$ | 16.7 | \$ | (4.5) | \$ | (1.9) | \$ | (68.7) | \$ | 19.4 | \$ | 135.8 | \$ | 159.7 | \$ | 95.2 |
| Salary Gains |  | (2.2) |  | 6.9 |  | 117.5 |  | 186.3 |  | 164.7 |  | 91.1 |  | 6.5 |  | (29.7) |  | 61.2 |  | 48.3 |
| Termination of Employment |  | 7.6 |  | 6.5 |  | 3.4 |  | 9.0 |  | 2.5 |  | 25.8 |  | 11.8 |  | 2.9 |  | 4.4 |  | 5.2 |
| Return to Work from Terminated |  | (4.5) |  | (5.4) |  | (6.6) |  | (4.5) |  | (16.8) |  | (12.6) |  | (7.9) |  | (22.6) |  | (43.9) |  | (25.8) |
| Gain (or Loss) | \$ | (42.7) | \$ | 96.0 | \$ | 131.0 | \$ | 186.3 | \$ | 148.5 | \$ | 35.6 | \$ | 29.8 | \$ | 86.4 | \$ | 181.4 | \$ | 122.9 |
| During Year from Selected Experience |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

WSPRS Plan 1/2: Selected Gains and Losses During Fiscal Years Ended June 30, 2006-2015 Resulting from Differences Between Assumed Experience and Actual Experience - Dollars in Millions

| \$ Gain (or Loss) for Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |
| Investment Gains ${ }^{1}$ | \$ | (23.3) | \$ | (10.0) | \$ | (10.2) | \$ | (6.7) | \$ | (8.5) | \$ | (20.5) | \$ | (6.2) | \$ | 28.4 | \$ | 32.0 | \$ | 19.6 |
| Salary Gains |  | 7.2 |  | (1.3) |  | 8.6 |  | 12.5 |  | 18.8 |  | 19.0 |  | (0.7) |  | (5.9) |  | 5.5 |  | (1.9) |
| Termination of Employment |  | 5.7 |  | 2.8 |  | (0.3) |  | 2.5 |  | 0.1 |  | (1.0) |  | 1.2 |  | 1.1 |  | 0.1 |  | 1.2 |
| Return to Work from Terminated |  | (0.5) |  | 0.0 |  | (0.4) |  | (0.3) |  | (0.2) |  | (0.5) |  | (0.5) |  | 0.0 |  | (49.7) |  | (0.7) |
| Gain (or Loss) During Year from Selected Experience | \$ | (10.9) | \$ | (8.5) | \$ | (2.3) | \$ | 8.0 | \$ | 10.2 | \$ | (3.0) | \$ | (6.2) | \$ | 23.6 | \$ | (12.1) | \$ | 18.2 |

[^19]
## Schedules of Funding Progress

The Schedules of Funding Progress present multiyear trend information about whether the actuarial values of plan assets are increasing or decreasing over time relative to the AALs for benefits.

## PERS Plan 1

Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 7,315 | \$ | 7,761 | \$ | 8,053 | \$ | 8,521 | \$ | 8,883 | \$ | 9,293 | \$ | 9,776 | \$ | 9,853 |  | 9,715 |  | 9,591 |
| Actuarial Accrued Liability | \$ | 12,553 | \$ | 12,720 | \$ | 12,874 | \$ | 12,360 | \$ | 12,571 | \$ | 12,538 | \$ | 13,984 |  | 13,901 |  | 13,740 | \$ | 13,129 |
| Unfunded Actuarial Liability | \$ | 5,239 | \$ | 4,959 | \$ | 4,821 | \$ | 3,839 | \$ | 3,688 | \$ | 3,245 | \$ | 4,209 | \$ | 4,048 | \$ | 4,025 |  | 3,538 |
| Percentage Funded |  | 58\% |  | 61\% |  | 63\% |  | 69\% |  | 71\% |  | 74\% |  | 70\% |  | 71\% |  | 71\% |  | 73\% |
| Covered Payroll | \$ | 231 | \$ | 277 | \$ | 318 | \$ | 371 | \$ | 432 | \$ | 507 | \$ | 580 |  | \$ 638 |  | \$ 676 |  | \$ 725 |
| Unfunded Actuarial Liability as a Percentage of Covered Payroll |  | 2,271\% |  | 1,792\% |  | 1,517\% |  | 1,035\% |  | 854\% |  | 640\% |  | 725\% |  | 634\% |  | 595\% |  | 488\% |

PERS Plan 2/3
Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 28,292 | \$ | 26,386 | \$ | 24,335 | \$ | 22,653 | \$ | 20,997 | \$ | 19,474 | \$ | 18,260 | \$ | 16,693 | \$ | 14,888 | \$ | 13,529 |
| Actuarial Accrued Liability | \$ | 32,008 | \$ | 29,321 | \$ | 26,540 | \$ | 22,780 | \$ | 21,627 | \$ | 20,029 | \$ | 18,398 | \$ | 16,508 | \$ | 14,661 | \$ | 12,770 |
| Unfunded Actuarial Liability | \$ | 3,715 | \$ | 2,935 | \$ | 153 | \$ | 127 | \$ | 630 | \$ | 555 | \$ | 137 | \$ | (185) | \$ | (227) | \$ | (759) |
| Percentage Funded |  | 88\% |  | 90\% |  | 99\% |  | 99\% |  | 97\% |  | 97\% |  | 99\% |  | 101\% |  | 102\% |  | 106\% |
| Covered Payroll | \$ | 8,984 | \$ | 8,719 | \$ | 8,339 | \$ | 8,193 | \$ | 8,148 | \$ | 8,206 | \$ | 8,132 | \$ | 7,869 | \$ | 7,157 | \$ | 6,771 |
| Unfunded Actuarial Liability as a Percentage of Covered Payroll |  | 41\% |  | 34\% |  | 2\% |  | 2\% |  | 8\% |  | 7\% |  | 2\% |  | (2)\% |  | (3)\% |  | (11)\% |

## SERS Plan 2/3

Dollars in Millions

| Actuarial <br> Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 3,901 | \$ | 3,624 | \$ | 3,335 | \$ | 3,100 | \$ | 2,872 | \$ | 2,664 | \$ | 2,503 | \$ | 2,303 | \$ | 2,133 | \$ | 1,934 |
| Actuarial Accrued Liability | \$ | 4,381 | \$ | 3,965 | \$ | 3,581 | \$ | 3,103 | \$ | 2,956 | \$ | 2,706 | \$ | 2,493 | \$ | 2,207 | \$ | 1,998 | \$ | 1,787 |
| Unfunded Actuarial Liability | \$ | 481 | \$ | 341 | \$ | 247 | \$ | 3 | \$ | 84 | \$ | 41 | \$ | (10) | \$ | (95) | \$ | (136) | \$ | (147) |
| Percentage Funded |  | 89\% |  | 91\% |  | 93\% |  | 100\% |  | 97\% |  | 98\% |  | 100\% |  | 104\% |  | 107\% |  | 108\% |
| Covered Payroll | \$ | 1,697 | \$ | 1,591 | \$ | 1,514 | \$ | 1,479 | \$ | 1,490 | \$ | 1,475 | \$ | 1,467 | \$ | 1,379 | \$ | 1,283 | \$ | 1,243 |
| Unfunded Actuarial Liability as a Percentage of Covered Payroll |  | 28\% |  | 21\% |  | 16\% |  | 0\% |  | 6\% |  | 3\% |  | (1)\% |  | (7)\% |  | (11)\% |  | (12)\% |

## Schedules of Funding Progress (cont.)

PSERS Plan $2^{1}$
Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 338 | \$ | 278 | \$ | 224 | \$ | 180 | \$ | 141 | \$ | 103 | \$ | 69 | \$ | 39 | \$ | 14 |  |
| Actuarial Accrued Liability | \$ | 357 | \$ | 291 | \$ | 218 | \$ | 159 | \$ | 126 | \$ | 94 | \$ | 64 | \$ | 37 | \$ | 19 | - |
| Unfunded Actuarial Liability | \$ | 19 | \$ | 13 | \$ | (7) | \$ | (22) | \$ | (14) | \$ | (9) | \$ | (5) | \$ | (2) | \$ | 6 | - |
| Percentage Funded |  | 95\% |  | 96\% |  | 103\% |  | 114\% |  | 111\% |  | 109\% |  | 108\% |  | 106\% |  | 71\% | - |
| Covered Payroll | \$ | 302 | \$ | 275 | \$ | 253 | \$ | 238 | \$ | 233 | \$ | 227 | \$ | 223 | \$ | 200 | \$ | 134 | - |
| Unfunded <br> Actuarial Liability as a Percentage of Covered Payroll |  | 6\% |  | 5\% |  | (3)\% |  | (9)\% |  | (6)\% |  | (4)\% |  | (2)\% |  | (1)\% |  | 4\% | - |

${ }^{1}$ PSERS Plan 2 became effective July 1, 2006.

TRS Plan 1
Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 5,870 | \$ | 6,353 | \$ | 6,717 | \$ | 7,145 | \$ | 7,485 | \$ | 7,791 | \$ | 8,146 | \$ | 8,262 | \$ | 8,302 | \$ | 8,275 |
| Actuarial Accrued Liability | \$ | 9,107 | \$ | 9,250 | \$ | 9,429 | \$ | 9,038 | \$ | 9,232 | \$ | 9,201 | \$ | 10,820 | \$ | 10,754 | \$ | 10,826 | \$ | 10,359 |
| Unfunded Actuarial Liability | \$ | 3,237 | \$ | 2,897 | \$ | 2,712 | \$ | 1,894 | \$ | 1,747 | \$ | 1,410 | \$ | 2,674 | \$ | 2,492 | \$ | 2,524 | \$ | 2,084 |
| Percentage Funded |  | 64\% |  | 69\% |  | 71\% |  | 79\% |  | 81\% |  | 85\% |  | 75\% |  | 77\% |  | 77\% |  | 80\% |
| Covered Payroll | \$ | 108 | \$ | 143 | \$ | 183 | \$ | 228 | \$ | 284 | \$ | 344 | \$ | 389 | \$ | 432 | \$ | 426 | \$ | 478 |
| Unfunded Actuarial Liability as a Percentage of Covered Payroll |  | 3,006\% |  | 2,022\% |  | 1,481\% |  | 829\% |  | 615\% |  | 410\% |  | 688\% |  | 576\% |  | 592\% |  | 436\% |

TRS Plan 2/3
Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 9,953 | \$ | 9,193 | \$ | 8,406 | \$ | 7,758 | \$ | 7,141 | \$ | 6,593 | \$ | 6,160 | \$ | 5,681 | \$ | 5,277 | \$ | 4,835 |
| Actuarial Accrued Liability | \$ | 10,831 | \$ | 9,819 | \$ | 8,794 | \$ | 7,478 | \$ | 7,194 | \$ | 6,558 | \$ | 6,048 | \$ | 5,264 | \$ | 4,682 | \$ | 4,030 |
| Unfunded Actuarial Liability | \$ | 879 | \$ | 626 | \$ | 388 | \$ | (280) | \$ | 53 | \$ | (36) | \$ | (112) | \$ | (417) | \$ | (594) | \$ | (806) |
| Percentage Funded |  | 92\% |  | 94\% |  | 96\% |  | 104\% |  | 99\% |  | 101\% |  | 102\% |  | 108\% |  | 113\% |  | 120\% |
| Covered Payroll | \$ | 4,667 | \$ | 4,450 | \$ | 4,223 | \$ | 4,077 | \$ | 4,085 | \$ | 3,966 | \$ | 3,957 | \$ | 3,621 | \$ | 3,318 | \$ | 3,225 |
| Unfunded Actuarial Liability as a Percentage of Covered Payroll |  | 19\% |  | 14\% |  | 9\% |  | (7)\% |  | 1\% |  | (1)\% |  | (3)\% |  | (12)\% |  | (18)\% |  | (25)\% |

## Schedules of Funding Progress (cont.)

## LEOFF Plan 1

Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 | 6/30/2014 | 6/30/2013 | 6/30/2012 | 6/30/2011 | 6/30/2010 | 6/30/2009 | 6/30/2008 | 6/30/2007 | 9/30/2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ 5,404 | \$ 5,499 | \$ 5,516 | \$ 5,562 | \$ 5,565 | \$ 5,561 | \$ 5,612 | \$ 5,592 | \$ 5,298 | \$ 5,018 |
| Actuarial Accrued Liability | \$ 4,307 | \$ 4,323 | \$ 4,409 | \$ 4,120 | \$ 4,145 | \$ 4,393 | \$ 4,492 | \$ 4,368 | \$ 4,340 | \$ 4,309 |
| Unfunded Actuarial Liability | \$ $(1,097)$ | \$ $(1,177)$ | \$ $(1,108)$ | \$ $(1,441)$ | \$ $(1,421)$ | \$ $(1,168)$ | \$ $(1,120)$ | \$ $(1,225)$ | \$ (958) | \$ (709) |
| Percentage Funded | 125\% | 127\% | 125\% | 135\% | 134\% | 127\% | 125\% | 128\% | 122\% | 116\% |
| Covered Payroll <br> Unfunded Actuarial Liability as a Percentage of Covered Payroll | $\begin{aligned} & \text { \$ } \\ & (12,535) \% \end{aligned}$ | $\begin{array}{lr} \$ & 13 \\ & (9,304) \% \end{array}$ | $\begin{array}{lr} \$ & 15 \\ & (7,496) \% \end{array}$ | $\begin{array}{lr} \$ & 19 \\ & (7,685) \% \end{array}$ | $\begin{aligned} & \$ \quad 25 \\ & \\ & (5,794) \% \end{aligned}$ | $\begin{array}{lr} \$ & 29 \\ & (4,012) \% \end{array}$ | $\begin{aligned} & \$ \quad 33 \\ & (3,360) \% \end{aligned}$ | $\begin{aligned} & \$ \quad 37 \\ & \\ & (3,303) \% \end{aligned}$ | $\begin{aligned} & \$ \quad 43 \\ & \\ & (2,243) \% \end{aligned}$ | $\begin{array}{lr} \$ & 48 \\ & (1,475) \% \end{array}$ |

## LEOFF Plan 2

Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 9,320 | \$ | 8,638 | \$ | 7,862 | \$ | 7,222 | \$ | 6,621 | \$ | 6,043 | \$ | 5,564 | \$ | 5,053 | \$ | 4,360 | \$ | 3,844 |
| Actuarial Accrued Liability | \$ | 8,838 | \$ | 8,069 | \$ | 7,220 | \$ | 6,353 | \$ | 5,941 | \$ | 5,164 | \$ | 4,641 | \$ | 3,998 | \$ | 3,626 | \$ | 3,486 |
| Unfunded Actuarial Liability | \$ | (482) | \$ | (569) | \$ | (643) | \$ | (869) | \$ | (679) | \$ | (879) | \$ | (923) | \$ | $(1,054)$ | \$ | (734) | \$ | (358) |
| Percentage Funded |  | 105\% |  | 107\% |  | 109\% |  | 114\% |  | 111\% |  | 117\% |  | 120\% |  | 126\% |  | 120\% |  | 110\% |
| Covered Payroll <br> Unfunded Actuarial Liability as a Percentage of Covered Payroll | \$ | $\begin{aligned} & 1,743 \\ & (28) \% \end{aligned}$ | \$ | $\begin{aligned} & 1,661 \\ & (34) \% \end{aligned}$ | \$ | $\begin{aligned} & 1,597 \\ & (40) \% \end{aligned}$ | \$ | $\begin{aligned} & 1,560 \\ & (56) \% \end{aligned}$ | \$ | $\begin{aligned} & 1,535 \\ & (44) \% \end{aligned}$ | \$ | $\begin{aligned} & 1,490 \\ & (59) \% \end{aligned}$ | \$ | 1,442 <br> (64)\% | \$ | $\begin{aligned} & 1,345 \\ & (78) \% \end{aligned}$ | \$ | $\begin{aligned} & 1,234 \\ & (59) \% \end{aligned}$ | \$ | $\begin{aligned} & 1,172 \\ & (31) \% \end{aligned}$ |

WSPRS Plan 1/2
Dollars in Millions

| Actuarial Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 1,067 | \$ | 1,044 | \$ | 1,009 | \$ | 982 | \$ | 949 | \$ | 920 | \$ | 900 | \$ | 870 | \$ | 800 | \$ | 743 |
| Actuarial Accrued Liability | \$ | 1,093 | \$ | 1,042 | \$ | 987 | \$ | 884 | \$ | 859 | \$ | 812 | \$ | 790 | \$ | 745 | \$ | 702 | \$ | 671 |
| Unfunded Actuarial Liability | \$ | 26 | \$ | (2) | \$ | (22) | \$ | (97) | \$ | (90) | \$ | (107) | \$ | (110) | \$ | (124) | \$ | (98) | \$ | (72) |
| Percentage Funded |  | 98\% |  | 100\% |  | 102\% |  | 111\% |  | 110\% |  | 113\% |  | 114\% |  | 117\% |  | 114\% |  | 111\% |
| Covered Payroll <br> Unfunded Actuarial Liability as a Percentage of Covered Payroll | \$ | 82 $32 \%$ | \$ | 82 (3)\% | \$ | $\begin{array}{r} 80 \\ (28) \% \end{array}$ | \$ | $\begin{array}{r} 80 \\ (121) \% \end{array}$ | \$ | $\begin{array}{r} 82 \\ (111) \% \end{array}$ | \$ | $\begin{array}{r} 83 \\ (130) \% \end{array}$ | \$ | $\begin{array}{r} 83 \\ (133) \% \end{array}$ | \$ | $\begin{array}{r} 79 \\ (158) \% \end{array}$ | \$ | $\begin{array}{r} 72 \\ (136) \% \end{array}$ | \$ | $\begin{array}{r} 69 \\ (105) \% \end{array}$ |

## Schedules of Funding Progress (cont.)

| JRS <br> Dollars in Millions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial <br> Valuation Date$\quad 6 / 30 / 2015$ |  |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| Actuarial Value of Plan Assets | \$ | 6 | \$ | 5 | \$ | 4 | \$ | 3 | \$ | 5 | \$ | 4 | \$ | 2 | \$ | 1 | \$ | 1 | \$ | - |
| Actuarial Accrued Liability | \$ | 100 | \$ | 105 | \$ | 108 | \$ | 104 | \$ | 109 | \$ | 84 | \$ | 89 | \$ | 92 | \$ | 85 | \$ | 88 |
| Unfunded Actuarial Liability | \$ | 94 | \$ | 100 | \$ | 104 | \$ | 101 | \$ | 104 | \$ | 80 | \$ | 87 | \$ | 91 | \$ | 85 | \$ | 88 |
| Percentage Funded |  | 6\% |  | 5\% |  | 4\% |  | 3\% |  | 5\% |  | 5\% |  | 2\% |  | 1\% |  | 1\% |  | 0\% |
| Covered Payroll | \$ | - | \$ | - | \$ | - | \$ | 0.3 | \$ | 0.5 | \$ | 0.7 | \$ | 0.9 | \$ | 1.3 | \$ | 1.3 | \$ | 1.4 |
| Unfunded Actuarial Liability as a Percentage of Covered Payroll |  | n/a |  | n/a |  | n/a |  | 79\% |  | 574\% |  | 11,565\% |  | 9,216\% |  | 7,141\% |  |  |  |  |

JRF
Dollars in Millions

| Actuarial <br> Valuation Date | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  | 9/30/2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Value of Plan Assets | \$ | 0.5 | \$ | 1.0 | \$ | 1.4 | \$ | 1.9 | \$ | 2.3 | \$ | 2.8 | \$ | 3.3 | \$ | 3.6 | \$ | 4.0 | \$ | 4.1 |
| Actuarial Accrued Liability | \$ | 3.1 | \$ | 3.3 | \$ | 3.5 | \$ | 3.6 | \$ | 3.9 | \$ | 3.2 | \$ | 3.4 | \$ | 3.5 | \$ | 3.9 | \$ | 4.0 |
| Unfunded Actuarial Liability | \$ | 2.6 | \$ | 2.3 | \$ | 2.1 | \$ | 1.7 | \$ | 1.5 | \$ | 0.4 | \$ | 0.1 | \$ | (0.1) | \$ | (0.1) | \$ | (0.1) |
| Percentage Funded |  | 16\% |  | 29\% |  | 40\% |  | 52\% |  | 61\% |  | 87\% |  | 97\% |  | 104\% |  | 103\% |  | 103\% |
| Covered Payroll | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Unfunded Actuarial Liability as a Percentage of Covered Payroll |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |

Liability amounts and ratios/percentages are based on actual, not rounded, figures.
PERS Plan $2 / 3$, SERS Plan $2 / 3$, PSERS Plan 2 , TRS Plan 2/3, LEOFF Plan 2 and WSPRS Plan $1 / 2$ : These plans all use the Aggregate Actuarial Cost Method, which does not identify or separately amortize unfunded actuarial accrued liabilities. For this reason, the information about funded status and funding progress shown above for these plans has been prepared using the Entry Age Actuarial Cost Method and is intended to serve as a surrogate for the funded status and funding progress information of these plans.
Source: Office of the State Actuary
Ten-year schedules of actuarially determined and actual contributions are included in the "Required Supplementary Information" pages within the Financial Section.

## Funded Status and Funding Progress

## Funded Status of Each Plan as of June 30, 2015, the Most Recent Actuarial Valuation Date Dollars in Millions

| Plan |  | Actuarial Assets (a) |  |  | Actuarial ed Liability Entry Age <br> (b) | Unfunded AAL <br> (UAAL) <br> (b-a) |  |  | Funded Ratio (a/b) | Covered Payroll <br> (c) |  | UAAL as a \% of Covered Payroll [(b-a)/c] |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PERS 1 | \$ | 7,314.9 |  | \$ | 12,553.5 |  | \$ | 5,238.5 | 58\% |  | \$ 230.7 | 2,271\% |
| PERS 2/3¹ |  | 28,292.3 |  |  | 32,007.6 |  |  | 3,715.3 | 88\% |  | 8,984.4 | 41\% |
| TRS 1 |  | 5,870.5 |  |  | 9,107.5 |  |  | 3,237.0 | 64\% |  | 107.7 | 3,006\% |
| TRS 2/31 |  | 9,952.8 |  |  | 10,831.4 |  |  | 878.5 | 92\% |  | 4,667.1 | 19\% |
| SERS 2/31 |  | 3,900.6 |  |  | 4,381.5 |  |  | 480.9 | 89\% |  | 1,696.8 | 28\% |
| PSERS ${ }^{1}$ |  | 337.9 |  |  | 356.9 |  |  | 19.0 | 95\% |  | 302.3 | 6\% |
| LEOFF 1 |  | 5,403.6 |  |  | 4,307.1 |  |  | $(1,096.6)$ | 125\% |  | 8.7 | $(12,535) \%$ |
| LEOFF $2^{1}$ |  | 9,320.2 |  |  | 8,838.5 |  |  | (481.7) | 105\% |  | 1,742.9 | (28)\% |
| WSPRS 1/2 ${ }^{1}$ |  | 1,067.1 |  |  | 1,093.0 |  |  | 25.9 | 98\% |  | 81.8 | 32\% |
| JRS |  | 6.3 |  |  | 100.3 |  |  | 94.0 | 6\% |  | - | n/a |
| JRF |  | 0.5 |  |  | 3.1 |  |  | 2.6 | 16\% |  | - | n/a |
| Total | \$ | 71,466.8 | \$ |  | 83,580.3 | \$ |  | 12,113.5 | 86\% | \$ | 17,822.6 | 68\% |

${ }^{1}$ These plans use the Aggregate actuarial cost method which does not separately amortize an Unfunded Actuarial Accrued Liabilities (UAAL) outside of the normal cost. Instead, the Entry Age Normal actuarial cost method was used to determine the UAAL. This method is intended to serve as a surrogate for the funded status of these plans.
Totals might not agree due to rounding. Percentages are calculated using unrounded totals.
Source: Office of the State Actuary

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## Additional Information for the Defined Benefit Pension Plans

## Additional Information

For the Fiscal Year Ended June 30, 2016 - Page 1 of 2

|  | PERS Plan 1 | PERS Plan 2/3 | TRS Plan 1 | TRS Plan 2/3 | SERS Plan 2/3 | PSERS Plan 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | 6/30/2015 | 6/30/2015 | 6/30/2015 | 6/30/2015 | 6/30/2015 | 6/30/2015 |
| Actuarial Cost Method | entry age normal ${ }^{1}$ | aggregate ${ }^{2}$ | entry age normal ${ }^{1}$ | aggregate ${ }^{2}$ | aggregate ${ }^{2}$ | aggregate ${ }^{2}$ |
| Amortization Method - Funding | level $\%^{4}$ | n/a | level \% ${ }^{4}$ | n/a | $\mathrm{n} / \mathrm{a}$ | n/a |
| Remaining Amortization Years (Closed) | 10-year rolling | n/a | 10-year rolling | n/a | n/a | n/a |
| Remaining Amortization Period (Closed) | n/a | n/a | n/a | n/a | n/a | n/a |
| Asset Valuation Method | 8-year graded smoothed fair value ${ }^{5}$ | 8-year graded smoothed fair value ${ }^{5}$ | 8 -year graded smoothed fair value ${ }^{5}$ | 8-year graded smoothed fair value ${ }^{5}$ | 8-year graded smoothed fair value ${ }^{5}$ | 8-year graded smoothed fair value ${ }^{5}$ |
| Actuarial Assumptions |  |  |  |  |  |  |
| Investment Rate of Return ${ }^{7}$ <br> Projected Salary Increases: Salary <br> Inflation at $3.75 \%$ Plus the Service-Based <br> Salary Increase Described Below | 7.70\% | 7.70\% | 7.70\% | 7.70\% | 7.70\% | 7.70\% |
| Initial Increases (Grades Down to 0\%) | 6.00\% | 6.00\% | 5.10\% | 5.10\% | 6.60\% | 6.00\% |
| Applied for X Years of Service | 17 years | 17 years | 25 years | 25 years | 20 years | 17 years |
| Includes Inflation at | n/a | 3.00\% | n/a | 3.00\% | 3.00\% | 3.00\% |
| Cost-of-Living Adjustments | Minimum COLA ${ }^{6}$ | CPI increase, maximum 3\% | Minimum COLA ${ }^{6}$ | CPI increase, maximum 3\% | CPI increase, maximum 3\% | CPI increase, maximum 3\% |


| Annual Gain/Loss ${ }^{5}$ |  |  |
| ---: | ---: | ---: |
| Rate of Return | Smoothing Period | Annual Recognition |
| $14.80 \%$ and higher | 8 years | $12.50 \%$ |
| $13.80-14.80 \%$ | 7 years | $14.29 \%$ |
| $12.80-13.80 \%$ | 6 years | $16.67 \%$ |
| $11.80-12.80 \%$ | 5 years | $20.00 \%$ |
| $10.80-11.80 \%$ | 4 years | $25.00 \%$ |
| $9.80-10.80 \%$ | 3 years | $33.33 \%$ |
| $8.80-9.80 \%$ | 2 years | $50.00 \%$ |
| $6.80-8.80 \%$ | 1 year | $100.00 \%$ |
| $5.80-6.80 \%$ | 2 years | $50.00 \%$ |
| $4.80-5.80 \%$ | 3 years | $33.33 \%$ |
| $3.80-4.80 \%$ | 4 years | $25.00 \%$ |
| $2.80-3.80 \%$ | 5 years | $20.00 \%$ |
| $1.80-2.80 \%$ | 6 years | $16.67 \%$ |
| $0.80-1.80 \%$ | 7 years | $14.29 \%$ |
| $0.80 \%$ and lower | 8 years | $12.50 \%$ |

Source: Office of the State Actuary

## Additional Information for the Defined Benefit Pension Plans (cont.)

| Additional Information <br> For the Fiscal Year Ended June 30, 2016 - Page 2 of 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEOFF Plan 1 | LEOFF Plan 2 | WSPRS Plan 1/2 | JRS | JRF |
| Valuation Date | 6/30/2015 | 6/30/2015 | 6/30/2015 | 6/30/2015 | 6/30/2015 |
| Actuarial Cost Method | frozen initial liability ${ }^{1}$ | aggregate ${ }^{2}$ | aggregate ${ }^{2}$ | entry age ${ }^{3}$ | entry age ${ }^{3}$ |
| Amortization Method - Funding | level $\%^{4}$ | n/a | n/a | n/a | n/a |
| Remaining Amortization Years (Closed) | 9.00 | n/a | n/a | 5 -year rolling | 5 -year rolling |
| Remaining Amortization Period (Closed) | 6/30/2024 | n/a | n/a | n/a | n/a |
| Asset Valuation Method | 8 -year graded smoothed fair value ${ }^{5}$ | 8 -year graded smoothed fair value ${ }^{5}$ | 8-year graded smoothed fair value ${ }^{5}$ | market | market |
| Actuarial Assumptions |  |  |  |  |  |
| Investment Rate of Return ${ }^{7}$ <br> Projected Salary Increases (Salary Inflation at $3.75 \%$ Plus the Service-Based Salary Increase Described Below) | 7.70\% | 7.50\% | 7.70\% | 4.00\% | 4.00\% |
| Initial Increases (Grades Down to 0\%) | 10.70\% | 10.70\% | 8.50\% | 0.00\% | 0.00\% |
| Applied for X Years of Service | 25 years | 25 years | 27 years | n/a | n/a |
| Includes Inflation at | 3.00\% | 3.00\% | 3.00\% | 3.00\% | 3.00\% |
| Cost-of-Living Adjustments | CPI increase | CPI increase, maximum 3\% | CPI increase, maximum 3\% | CPI increase, maximum 3\% | none |

${ }^{1}$ PERS and TRS Plans 1 use a variation of the Entry Age Cost Method. LEOFF 1 uses a variation of the Frozen Initial Liability (FIL) Cost Method.
${ }^{2}$ The Aggregate Actuarial Cost Method does not identify or separately amortize unfunded actuarial accrued liabilities.
${ }^{3}$ Pay as You Go basis for funding
${ }^{4}$ Level percent of the system's payroll, including assumed system growth
${ }^{5}$ Asset Valuation Method: Eight-year, smoothed, fair value
The actuarial value of assets is calculated using an adjusted market value method by starting with the market value of assets. For subsequent years, the actuarial value of assets is determined by adjusting the market value of assets to reflect the difference between the actual investment return and the expected investment return during each of the past eight years - or, if fewer, the completed years since adoption - at the rates per year (annual recognition) shown above. The LEOFF 2 Annual Gain/Loss is centered around its $7.50 \%$ expected rate of return instead of 7.70\%.
${ }^{6}$ The PERS 1 and TRS 1 COLA
Qualifying retirees receive an increase in their monthly benefit once a year. The COLA on minimum benefit levels is calculated as the last unrounded COLA amount increased by $3 \%$, rounded to the nearest penny. Below are some historical monthly COLA amounts per year of service.
${ }^{7}$ The Legislature prescribes the assumed rate of investment return for all plans except JRS and JRF.

## Historical Monthly COLA

Amounts per Year of Service ${ }^{6}$

| Date | CoLA Type | Amount |
| ---: | ---: | ---: |
| $7 / 1 / 2016$ | Minimum | $\$ 2.25$ |
| $7 / 1 / 2015$ | Minimum | $\$ 2.18$ |
| $7 / 1 / 2014$ | Minimum | $\$ 2.12$ |
| $7 / 1 / 2013$ | Minimum | $\$ 2.06$ |
| $7 / 1 / 2012$ | Minimum | $\$ 2.00$ |
| $7 / 1 / 2011$ | Minimum | $\$ 1.94$ |
| $7 / 1 / 2010$ | Uniform | $\$ 1.88$ |
| $7 / 1 / 2009$ | Uniform | $\$ 1.83$ |

## Required Contribution Rates

## Required Contribution Rates

Expressed as a Percentage of Current-Year Covered Payroll at the Close of Fiscal Year 2016

|  | Employer Actual Contribution Rates ${ }^{1}$ |  |  | Employee Actual Contribution Rates |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Plan 1 | Plan 2 | Plan $3^{2}$ | Plan 1 | Plan 2 | Plan 3 |
| PERS |  |  |  |  |  |  |
| Members Not Participating in JBM |  |  |  |  |  |  |
| State Agencies | 11.18\% | 11.18\% | 11.18\% | 6.00\% | 6.12\% | varies ${ }^{3}$ |
| Local Governmental Units | 11.18\% | 11.18\% | 11.18\% | 6.00\% | 6.12\% | varies ${ }^{3}$ |
| State Government Elected Officials | 16.68\% | 11.18\% | 11.18\% | 7.50\% | 6.12\% | varies ${ }^{3}$ |
| Members Participating in JBM |  |  |  |  |  |  |
| State Agencies | 13.68\% | 13.68\% | 13.68\% | 9.76\% | 12.80\% | 7.50\% ${ }^{4}$ |
| Local Governmental Units | 11.18\% | 11.18\% | 11.18\% | 12.26\% | 15.30\% | 7.50\% ${ }^{4}$ |
| SERS |  |  |  |  |  |  |
| State Agencies | n/a | 11.58\% | 11.58\% | n/a | 5.63\% | varies ${ }^{3}$ |
| Local Governmental Units | n/a | 11.58\% | 11.58\% | n/a | 5.63\% | varies ${ }^{3}$ |
| PSERS |  |  |  |  |  |  |
| State Agencies | $\mathrm{n} / \mathrm{a}$ | 11.54\% | n/a | n/a | 6.59\% | n/a |
| Local Governmental Units | n/a | 11.54\% | n/a | n/a | 6.59\% | n/a |
| TRS |  |  |  |  |  |  |
| Members Not Participating in JBM |  |  |  |  |  |  |
| State Agencies | 13.13\% | 13.13\% | 13.13\% | 6.00\% | 5.95\% | varies ${ }^{3}$ |
| Local Governmental Units | 13.13\% | 13.13\% | 13.13\% | 6.00\% | 5.95\% | varies ${ }^{3}$ |
| State Government Elected Officials | 13.13\% | 13.13\% | 13.13\% | 7.50\% | 5.95\% | varies ${ }^{3}$ |
| Members Participating in JBM |  |  |  |  |  |  |
| State Agencies | 13.13\% | n/a | n/a | 9.76\% | n/a | n/a |
| LEOFF |  |  |  |  |  |  |
| Local Governmental Units | 0.18\% | 5.23\% | n/a | n/a | 8.41\% | n/a |
| Ports and Universities | $\mathrm{n} / \mathrm{a}$ | 8.59\% | n/a | n/a | 8.41\% | n/a |
| State of Washington | n/a | 3.36\% | n/a | n/a | n/a | n/a |
| WSPRS |  |  |  |  |  |  |
| State Agencies | 8.34\% | 8.34\% | n/a | 6.84\% | 6.84\% | n/a |

${ }^{1}$ Employer rates include an administrative expense rate of $0.18 \%$.
${ }^{2}$ Plan 3 defined benefit portion only
${ }^{3}$ Variable from $5 \%$ to $15 \%$ based on rate the member selects
${ }^{4}$ Minimum rate

## Statistical Section

## 2016 Highlights

## Automatic DCP enrollment

Enacted by the Legislature in 2016, this program will automatically enroll all new, full-time state employees in the Deferred Compensation Program starting in January 2017. (Enrollees will have the ability to opt out if they wish.)

Patterned after successful programs in other states, auto-enrollment is expected to significantly boost the number of employees who are increasing their supplemental savings for retirement.

## Statistical Section

## Statistical Section Table of Contents

This section of the Department of Retirement Systems' Comprehensive Annual Financial Report presents detailed information that expands on the financial statements, note disclosures and required supplementary information that speak to the overall financial health of DRS.

## FINANCIAL TRENDS

172 These schedules contain trend information about how the financial performance and well-being of DRS have changed over time.

## DEMOGRAPHIC INFORMATION

188 These schedules contain demographic and historical information regarding membership and employer participation in the pension plans DRS offers.

## OPERATING INFORMATION

212 These schedules contain detailed payment information about the benefit services DRS provides.

## DEFERRED COMPENSATION INFORMATION

240 These schedules contain comprehensive information about the state's Deferred Compensation Program.

[^20]
## 도 Schedule of Changes in Fiduciary Net Position

| PERS Plan 1 <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 595,982 | \$ | 462,100 | \$ | 448,895 | \$ | 266,270 | \$ | 257,197 | \$ | 145,585 | \$ | 154,023 | \$ | 325,248 | \$ | 221,787 | \$ | 118,660 |
| Employee Contributions |  | 13,663 |  | 15,806 |  | 18,797 |  | 21,362 |  | 24,317 |  | 28,767 |  | 33,152 |  | 37,791 |  | 41,925 |  | 44,775 |
| Investment Income (Loss) ${ }^{1}$ |  | 157,083 |  | 336,316 |  | 1,312,000 |  | 863,182 |  | 86,377 |  | 1,523,415 |  | 980,360 |  | $(2,373,373)$ |  | $(114,595)$ |  | 2,086,563 |
| Transfers |  | 117 |  | 22 |  | 36 |  | 38 |  | 97 |  | 90 |  | 1 |  | 1 |  | 343 |  | 519 |
| Miscellaneous ${ }^{2}$ |  | 7,630 |  | 8,650 |  | 12,189 |  | 12,024 |  | 10,269 |  | 12,705 |  | 11,566 |  | 10,700 |  | 13,262 |  | 9,513 |
| Total Additions |  | 774,475 |  | 822,894 |  | 1,791,917 |  | 1,162,876 |  | 378,257 |  | 1,710,562 |  | 1,179,102 |  | $(1,999,633)$ |  | 162,722 |  | 2,260,030 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 1,198,836 |  | 1,198,965 |  | 1,189,496 |  | 1,181,380 |  | 1,173,683 |  | 1,149,522 |  | 1,111,386 |  | 1,070,929 |  | 1,027,934 |  | 978,995 |
| Refunds |  | 4,373 |  | 4,029 |  | 4,219 |  | 3,998 |  | 4,554 |  | 3,470 |  | 4,946 |  | 5,071 |  | 5,573 |  | 6,215 |
| Transfers |  | 520 |  | 30 |  | - |  | 710 |  | 265 |  | 362 |  | 140 |  | 2,021 |  | 159 |  | 31 |
| Administrative Expenses |  | 2,819 |  | 2,707 |  | 3,016 |  | 4,773 |  | 3,522 |  | 3,213 |  | 3,885 |  | 4,401 |  | 4,739 |  | 4,763 |
| Total Deductions |  | 1,206,548 |  | 1,205,731 |  | 1,196,731 |  | 1,190,861 |  | 1,182,024 |  | 1,156,567 |  | 1,120,357 |  | 1,082,422 |  | 1,038,405 |  | 990,004 |
| Total Changes in Fiduciary Net Position | \$ | $(432,073)$ | \$ | $(382,837)$ | \$ | 595,186 | \$ | $(27,985)$ | \$ | $(803,767)$ | \$ | 553,995 | \$ | 58,745 | \$ | $(3,082,055)$ | \$ | $(875,683)$ | \$ | 1,270,026 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 7,561,078 |  | 7,943,915 |  | 7,348,729 |  | 7,376,714 |  | 8,180,481 |  | 7,626,486 |  | 7,567,741 |  | 10,649,796 |  | 11,525,479 |  | 10,255,453 |
| End of Year | \$ | 7,129,005 | \$ | 7,561,078 | \$ | 7,943,915 | \$ | 7,348,729 | \$ | 7,376,714 | \$ | 8,180,481 | \$ | 7,626,486 | \$ | 7,567,741 | \$ | 10,649,796 | \$ | 11,525,479 |
| Employer Contributions: \% of Covered Payroll |  | 273.3\% |  | 177.1\% |  | 145.0\% |  | 75.5\% |  | 64.4\% |  | 29.5\% |  | 26.9\% |  | 49.7\% |  | 31.1\% |  | 15.6\% |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)

| PERS Plan 2/3 <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 563,328 | \$ | 446,127 | \$ | 430,345 | \$ | 389,020 | \$ | 385,253 | \$ | 328,258 | \$ | 327,460 | \$ | 439,744 | \$ | 318,740 | \$ | 242,544 |
| Employee Contributions |  | 472,528 |  | 355,350 |  | 346,270 |  | 315,755 |  | 310,160 |  | 263,885 |  | 264,231 |  | 368,127 |  | 268,573 |  | 207,144 |
| Investment Income (Loss) ${ }^{1}$ |  | 725,476 |  | 1,295,320 |  | 4,444,937 |  | 2,556,131 |  | 284,681 |  | 3,468,458 |  | 1,868,154 |  | $(4,058,631)$ |  | $(224,724)$ |  | 3,054,707 |
| Transfers |  | 360 |  | 206 |  | 141 |  | 293 |  | 270 |  | 4,036 |  | 11,611 |  | 722 |  | 316 |  | 292 |
| Miscellaneous ${ }^{2}$ |  | 37,477 |  | 31,176 |  | 32,830 |  | 29,922 |  | 24,765 |  | 26,818 |  | 15,749 |  | 14,157 |  | 17,245 |  | 11,825 |
| Total Additions |  | 1,799,169 |  | 2,128,179 |  | 5,254,523 |  | 3,291,121 |  | 1,005,129 |  | 4,091,455 |  | 2,487,205 |  | $(3,235,881)$ |  | 380,150 |  | 3,516,512 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 776,213 |  | 665,408 |  | 565,660 |  | 460,074 |  | 376,999 |  | 310,943 |  | 251,765 |  | 207,319 |  | 170,317 |  | 143,802 |
| Refunds |  | 36,302 |  | 35,497 |  | 35,202 |  | 35,679 |  | 35,716 |  | 33,686 |  | 31,425 |  | 26,442 |  | 26,574 |  | 26,465 |
| Transfers |  | 4,740 |  | 1,823 |  | 2,441 |  | 5,538 |  | 2,180 |  | 8,528 |  | 5,407 |  | 8,903 |  | 70,935 |  | 3,904 |
| Administrative Expenses |  | 12,023 |  | 10,591 |  | 9,977 |  | 10,560 |  | 9,082 |  | 8,325 |  | 8,643 |  | 8,277 |  | 9,889 |  | 7,344 |
| Total Deductions |  | 829,278 |  | 713,319 |  | 613,280 |  | 511,851 |  | 423,977 |  | 361,482 |  | 297,240 |  | 250,941 |  | 277,715 |  | 181,515 |
| Total Changes in Fiduciary Net Position | \$ | 969,891 | \$ | 1,414,860 | \$ | 4,641,243 | \$ | 2,779,270 | \$ | 581,152 | \$ | 3,729,973 | \$ | 2,189,965 | \$ | $(3,486,822)$ | \$ | 102,435 | \$ | 3,334,997 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 29,515,161 |  | 28,100,301 |  | 23,459,058 |  | 20,679,788 |  | 20,098,636 |  | 16,368,663 |  | 14,178,698 |  | 17,665,520 |  | 17,563,085 |  | 14,228,088 |
| End of Year | \$ | 30,485,052 | \$ | 29,515,161 | \$ | 28,100,301 | \$ | 23,459,058 | \$ | 20,679,788 | \$ | 20,098,636 | \$ | 16,368,663 | \$ | 14,178,698 | \$ | 17,665,520 | \$ | 17,563,085 |
| Employer Contributions: \% of Covered Payroll |  | 6.0\% |  | 6.2\% |  | 6.1\% |  | 5.8\% |  | 5.8\% |  | 4.0\% |  | 4.0\% |  | 5.4\% |  | 4.1\% |  | 3.5\% |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.
$\bar{\Delta}$ Schedule of Changes in Fiduciary Net Position (cont.)

${ }^{1}$ "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2 "Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)

| SERS Plan 2/3 <br> Dollars in Thousands | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 115,480 | \$ | 97,386 | \$ | 88,783 | \$ | 78,400 | \$ | 74,640 | \$ | 62,316 | \$ | 62,090 | \$ | 63,526 | \$ | 52,139 | \$ | 45,950 |
| Employee Contributions |  | 45,946 |  | 34,939 |  | 31,305 |  | 26,018 |  | 24,095 |  | 19,247 |  | 20,105 |  | 26,062 |  | 20,726 |  | 17,371 |
| Investment Income (Loss) ${ }^{1}$ |  | 100,211 |  | 178,042 |  | 607,984 |  | 348,956 |  | 38,452 |  | 473,113 |  | 255,525 |  | $(560,165)$ |  | $(29,922)$ |  | 435,696 |
| Transfers |  | 27 |  | 49 |  | 42 |  | 6 |  | 11 |  | 413 |  | 431 |  | 2,050 |  | 2,118 |  | 1,998 |
| Miscellaneous ${ }^{2}$ |  | 3,233 |  | 2,435 |  | 2,334 |  | 782 |  | 1,635 |  | 1,719 |  | 1,521 |  | 1,517 |  | 1,398 |  | 1,301 |
| Total Additions |  | 264,897 |  | 312,851 |  | 730,448 |  | 454,162 |  | 138,833 |  | 556,808 |  | 339,672 |  | $(467,010)$ |  | 46,459 |  | 502,316 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 112,753 |  | 96,184 |  | 81,216 |  | 66,426 |  | 53,630 |  | 43,338 |  | 34,449 |  | 28,307 |  | 22,627 |  | 17,641 |
| Refunds |  | 2,494 |  | 2,891 |  | 2,732 |  | 2,655 |  | 2,516 |  | 2,492 |  | 2,125 |  | 2,125 |  | 2,045 |  | 2,516 |
| Transfers |  | 1,242 |  | 630 |  | 504 |  | 330 |  | 454 |  | 423 |  | 8,141 |  | 956 |  | 89,481 |  | 275 |
| Administrative Expenses |  | 1,782 |  | 1,644 |  | 1,543 |  | 137 |  | 1,403 |  | 1,484 |  | 1,384 |  | 1,327 |  | 1,267 |  | 1,124 |
| Total Deductions |  | 118,271 |  | 101,349 |  | 85,995 |  | 69,548 |  | 58,003 |  | 47,737 |  | 46,099 |  | 32,715 |  | 115,420 |  | 21,556 |
| Total Changes in Fiduciary Net Position | \$ | 146,626 | \$ | 211,502 | \$ | 644,453 | \$ | 384,614 | \$ | 80,830 | \$ | 509,071 | \$ | 293,573 | \$ | $(499,725)$ | \$ | $(68,961)$ | \$ | 480,760 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 4,067,855 |  | 3,856,353 |  | 3,211,900 |  | 2,827,286 |  | 2,746,456 |  | 2,237,385 |  | 1,943,812 |  | 2,443,537 |  | 2,512,498 |  | 2,031,738 |
| End of Year | \$ | 4,214,481 | \$ | 4,067,855 | \$ | 3,856,353 | \$ | 3,211,900 | \$ | 2,827,286 | \$ | 2,746,456 | \$ | 2,237,385 | \$ | 1,943,812 | \$ | 2,443,537 | \$ | 2,512,498 |
| Employer Contributions: <br> \% of Covered Payroll |  | 6.1\% |  | 5.7\% |  | 5.5\% |  | 5.1\% |  | 4.6\% |  | 3.8\% |  | 3.8\% |  | 4.0\% |  | 3.4\% |  | 3.3\% |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.
$\overline{\boxed{ }}$ Schedule of Changes in Fiduciary Net Position (cont.)

| SERS Plan 3 <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Employee Contributions |  | 67,713 |  | 62,645 |  | 60,766 |  | 59,257 |  | 59,021 |  | 60,313 |  | 60,328 |  | 59,422 |  | 58,381 |  | 54,175 |
| Investment Income (Loss) ${ }^{1}$ |  | 32,171 |  | 62,821 |  | 245,336 |  | 147,193 |  | 10,372 |  | 209,367 |  | 108,480 |  | $(230,415)$ |  | $(27,970)$ |  | 169,969 |
| Transfers |  | 1,102 |  | 825 |  | 682 |  | 466 |  | 407 |  | 500 |  | 445 |  | 455 |  | 89,449 |  | 239 |
| Miscellaneous ${ }^{2}$ |  | 330 |  | 224 |  | 227 |  | 230 |  | 245 |  | 238 |  | 193 |  | 196 |  | 202 |  | 225 |
| Total Additions |  | 101,316 |  | 126,515 |  | 307,011 |  | 207,146 |  | 70,045 |  | 270,418 |  | 169,446 |  | $(170,342)$ |  | 120,062 |  | 224,608 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 2,610 |  | 1,526 |  | 854 |  | 463 |  | 302 |  | 182 |  | 91 |  | 62 |  | 8 |  | - |
| Refunds |  | 85,019 |  | 86,293 |  | 73,826 |  | 65,643 |  | 60,929 |  | 53,242 |  | 33,916 |  | 42,041 |  | 39,815 |  | 32,077 |
| Transfers |  | 311 |  | 270 |  | 302 |  | 190 |  | 163 |  | 597 |  | 416 |  | 520 |  | 183 |  | 289 |
| Administrative Expenses |  | 330 |  | 224 |  | 227 |  | 230 |  | 245 |  | 237 |  | 193 |  | 195 |  | 202 |  | 225 |
| Total Deductions |  | 88,270 |  | 88,313 |  | 75,209 |  | 66,526 |  | 61,639 |  | 54,258 |  | 34,616 |  | 42,818 |  | 40,208 |  | 32,591 |
| Total Changes in Fiduciary Net Position | \$ | 13,046 | \$ | 38,202 | \$ | 231,802 | \$ | 140,620 | \$ | 8,406 | \$ | 216,160 | \$ | 134,830 | \$ | $(213,160)$ | \$ | 79,854 | \$ | 192,017 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 1,688,472 |  | 1,650,270 |  | 1,418,468 |  | 1,277,848 |  | 1,269,442 |  | 1,053,282 |  | 918,452 |  | 1,131,612 |  | 1,051,758 |  | 859,741 |
| End of Year | \$ | 1,701,518 | \$ | 1,688,472 | \$ | 1,650,270 | \$ | 1,418,468 | \$ | 1,277,848 | \$ | 1,269,442 | \$ | 1,053,282 | \$ | 918,452 | \$ | 1,131,612 | \$ | 1,051,758 |
| Employer Contributions: \% of Covered Payroll |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)

| PSERS Plan 2 <br> Dollars in Thousands | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 20,058 | \$ | 18,704 | \$ | 17,124 | \$ | 15,650 | \$ | 15,285 | \$ | 15,591 | \$ | 15,238 | \$ | 14,510 | \$ | 11,700 | \$ | 6,612 |
| Employee Contributions |  | 21,134 |  | 18,650 |  | 17,344 |  | 15,798 |  | 15,228 |  | 15,353 |  | 15,213 |  | 14,557 |  | 11,740 |  | 6,664 |
| Investment Income (Loss) ${ }^{1}$ |  | 10,097 |  | 15,082 |  | 45,144 |  | 22,468 |  | 2,778 |  | 21,255 |  | 7,358 |  | $(9,383)$ |  | (765) |  | 813 |
| Transfers |  | 1 |  | 1 |  | 5 |  | 4 |  | 8 |  | 5 |  | 32 |  | - |  | 3 |  | - |
| Miscellaneous ${ }^{2}$ |  | 173 |  | 146 |  | 212 |  | 81 |  | 141 |  | 124 |  | 45 |  | 30 |  | 14 |  | 6 |
| Total Additions |  | 51,463 |  | 52,583 |  | 79,829 |  | 54,001 |  | 33,440 |  | 52,328 |  | 37,886 |  | 19,714 |  | 22,692 |  | 14,095 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 630 |  | 444 |  | 256 |  | 148 |  | 70 |  | 35 |  | 17 |  | 5 |  | - |  | - |
| Refunds |  | 2,647 |  | 2,612 |  | 2,194 |  | 2,186 |  | 1,921 |  | 1,780 |  | 928 |  | 466 |  | 152 |  | 23 |
| Transfers |  | 90 |  | - |  | - |  | 4 |  | 6 |  | 3 |  | 2 |  | 3 |  | 2 |  | - |
| Administrative Expenses |  | 150 |  | 116 |  | 104 |  | 1 |  | 70 |  | 82 |  | 50 |  | 40 |  | 26 |  | 27 |
| Total Deductions |  | 3,517 |  | 3,172 |  | 2,554 |  | 2,339 |  | 2,067 |  | 1,900 |  | 997 |  | 514 |  | 180 |  | 50 |
| Total Changes in Fiduciary Net Position | \$ | 47,946 | \$ | 49,411 | \$ | 77,275 | \$ | 51,662 | \$ | 31,373 | \$ | 50,428 | \$ | 36,889 | \$ | 19,200 | \$ | 22,512 | \$ | 14,045 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 352,795 |  | 303,384 |  | 226,109 |  | 174,447 |  | 143,074 |  | 92,646 |  | 55,757 |  | 36,557 |  | 14,045 |  | - |
| End of Year | \$ | 400,741 | \$ | 352,795 | \$ | 303,384 | \$ | 226,109 | \$ | 174,447 | \$ | 143,074 | \$ | 92,646 | \$ | 55,757 | \$ | 36,557 | \$ | 14,045 |
| Employer Contributions: <br> \% of Covered Payroll |  | 6.2\% |  | 6.4\% |  | 6.3\% |  | 6.3\% |  | 6.5\% |  | 6.7\% |  | 6.5\% |  | 6.5\% |  | 6.5\% |  | 6.5\% |

" "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2 "Miscellaneous additions" include restorations of employee contributions
$\overline{\mathrm{m}}$ Schedule of Changes in Fiduciary Net Position (cont.)


1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2 "Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)

## TRS Plan 2/3

Dollars in Thousands

|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 316,022 | \$ | 267,038 | \$ | 249,342 | \$ | 228,974 | \$ | 213,852 | \$ | 168,264 | \$ | 164,959 | \$ | 160,793 | \$ | 109,523 | \$ | 102,180 |
| Employee Contributions |  | 64,263 |  | 47,206 |  | 41,081 |  | 34,494 |  | 29,829 |  | 21,881 |  | 21,126 |  | 23,277 |  | 14,739 |  | 12,227 |
| Investment Income (Loss) ${ }^{1}$ |  | 258,964 |  | 453,535 |  | 1,539,901 |  | 877,562 |  | 96,411 |  | 1,175,293 |  | 629,396 |  | $(1,383,054)$ |  | $(73,457)$ |  | 1,078,134 |
| Transfers |  | 71 |  | 41 |  | 45 |  | 34 |  | 16 |  | 850 |  | 724 |  | 547 |  | 339 |  | 201 |
| Miscellaneous ${ }^{2}$ |  | 10,386 |  | 11,278 |  | 8,260 |  | 4,178 |  | 5,476 |  | 5,416 |  | 4,551 |  | 4,429 |  | 4,432 |  | 3,951 |
| Total Additions |  | 649,706 |  | 779,098 |  | 1,838,629 |  | 1,145,242 |  | 345,584 |  | 1,371,704 |  | 820,756 |  | $(1,194,008)$ |  | 55,576 |  | 1,196,693 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 218,011 |  | 183,212 |  | 149,522 |  | 116,662 |  | 91,400 |  | 72,138 |  | 55,654 |  | 44,795 |  | 36,016 |  | 28,534 |
| Refunds |  | 2,971 |  | 2,840 |  | 1,988 |  | 2,914 |  | 2,169 |  | 2,281 |  | 2,868 |  | 2,189 |  | 2,190 |  | 2,726 |
| Transfers |  | 1,934 |  | 659 |  | 445 |  | 858 |  | 652 |  | 390 |  | 369 |  | 2,670 |  | 168,866 |  | 440 |
| Administrative Expenses |  | 5,321 |  | 4,909 |  | 4,585 |  | 2,830 |  | 4,020 |  | 4,273 |  | 3,932 |  | 3,824 |  | 3,629 |  | 3,067 |
| Total Deductions |  | 228,237 |  | 191,620 |  | 156,540 |  | 123,264 |  | 98,241 |  | 79,082 |  | 62,823 |  | 53,478 |  | 210,701 |  | 34,767 |
| Total Changes in Fiduciary Net Position | \$ | 421,469 | \$ | 587,478 | \$ | 1,682,089 | \$ | 1,021,978 | \$ | 247,343 | \$ | 1,292,622 | \$ | 757,933 | \$ | $(1,247,486)$ | \$ | $(155,125)$ | \$ | 1,161,926 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 10,378,791 |  | 9,791,313 |  | 8,109,224 |  | 7,087,246 |  | 6,839,903 |  | 5,547,281 |  | 4,789,348 |  | 6,036,834 |  | 6,191,959 |  | 5,030,033 |
| End of Year | \$ | 10,800,260 | \$ | 10,378,791 | \$ | 9,791,313 | \$ | 8,109,224 | \$ | 7,087,246 | \$ | 6,839,903 | \$ | 5,547,281 | \$ | 4,789,348 | \$ | 6,036,834 | \$ | 6,191,959 |
| Employer Contributions: \% of Covered Payroll |  | 6.3\% |  | 5.7\% |  | 5.6\% |  | 5.4\% |  | 5.1\% |  | 4.0\% |  | 4.1\% |  | 4.1\% |  | 3.0\% |  | 3.0\% |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.
$\vec{\circ}$ Schedule of Changes in Fiduciary Net Position (cont.)

| TRS Plan 3 <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Employee Contributions |  | 309,813 |  | 286,156 |  | 273,656 |  | 262,293 |  | 255,867 |  | 257,718 |  | 254,197 |  | 247,891 |  | 234,661 |  | 213,878 |
| Investment Income (Loss) ${ }^{1}$ |  | 125,289 |  | 256,717 |  | 1,044,040 |  | 627,742 |  | 34,065 |  | 866,178 |  | 424,811 |  | $(864,630)$ |  | $(177,645)$ |  | 630,495 |
| Transfers |  | 1,585 |  | 1,372 |  | 1,115 |  | 839 |  | 618 |  | 650 |  | 598 |  | 971 |  | 168,817 |  | 581 |
| Miscellaneous ${ }^{2}$ |  | 1,159 |  | 789 |  | 784 |  | 775 |  | 811 |  | 767 |  | 610 |  | 605 |  | 597 |  | 712 |
| Total Additions |  | 437,846 |  | 545,034 |  | 1,319,595 |  | 891,649 |  | 291,361 |  | 1,125,313 |  | 680,216 |  | $(615,163)$ |  | 226,430 |  | 845,666 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 10,034 |  | 5,924 |  | 3,084 |  | 1,569 |  | 1,149 |  | 542 |  | 257 |  | 128 |  | 45 |  | 18 |
| Refunds |  | 289,785 |  | 269,378 |  | 235,635 |  | 176,052 |  | 150,404 |  | 115,571 |  | 71,665 |  | 76,166 |  | 84,776 |  | 62,810 |
| Transfers |  | 938 |  | 717 |  | 721 |  | 522 |  | 520 |  | 1,368 |  | 1,084 |  | 550 |  | 512 |  | 254 |
| Administrative Expenses |  | 1,158 |  | 788 |  | 784 |  | 775 |  | 811 |  | 767 |  | 610 |  | 605 |  | 597 |  | 712 |
| Total Deductions |  | 301,915 |  | 276,807 |  | 240,224 |  | 178,918 |  | 152,884 |  | 118,248 |  | 73,616 |  | 77,449 |  | 85,930 |  | 63,794 |
| Total Changes in Fiduciary Net Position | \$ | 135,931 | \$ | 268,227 | \$ | 1,079,371 | \$ | 712,731 | \$ | 138,477 | \$ | 1,007,065 | \$ | 606,600 | \$ | $(692,612)$ | \$ | 140,500 | \$ | 781,872 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 7,231,178 |  | 6,962,951 |  | 5,883,580 |  | 5,170,849 |  | 5,032,372 |  | 4,025,307 |  | 3,418,707 |  | 4,111,319 |  | 3,970,819 |  | 3,188,947 |
| End of Year | \$ | 7,367,109 | \$ | 7,231,178 | \$ | 6,962,951 | \$ | 5,883,580 | \$ | 5,170,849 | \$ | 5,032,372 | \$ | 4,025,307 | \$ | 3,418,707 | \$ | 4,111,319 | \$ | 3,970,819 |
| Employer Contributions: \% of Covered Payroll |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)


1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.
$\underset{\sim}{w}$ Schedule of Changes in Fiduciary Net Position (cont.)

| LEOFF Plan 2 <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 92,049 | \$ | 89,122 | \$ | 85,532 | \$ | 82,397 | \$ | 80,480 | \$ | 79,733 | \$ | 76,998 | \$ | 77,849 | \$ | 73,364 | \$ | 58,191 |
| Employee Contributions |  | 151,659 |  | 146,679 |  | 140,921 |  | 135,797 |  | 132,584 |  | 131,252 |  | 128,154 |  | 128,206 |  | 115,567 |  | 95,552 |
| State Contributions |  | 60,375 |  | 58,339 |  | 55,551 |  | 54,246 |  | 52,770 |  | 52,024 |  | 51,376 |  | 51,137 |  | 45,926 |  | 37,928 |
| Investment Income (Loss) ${ }^{1}$ |  | 244,054 |  | 430,410 |  | 1,456,269 |  | 825,071 |  | 92,867 |  | 1,084,240 |  | 568,518 |  | $(1,223,154)$ |  | $(70,257)$ |  | 892,480 |
| Transfers |  | 23 |  | - |  | 265 |  | 1,833 |  | 10 |  | 2,936 |  | 1,010 |  | 1,218 |  | 117 |  | - |
| Miscellaneous ${ }^{2}$ |  | 26,273 |  | 22,776 |  | 13,496 |  | 9,351 |  | 9,220 |  | 7,754 |  | 7,447 |  | 4,466 |  | 2,987 |  | 3,905 |
| Total Additions |  | 574,433 |  | 747,326 |  | 1,752,034 |  | 1,108,695 |  | 367,931 |  | 1,357,939 |  | 833,503 |  | $(960,278)$ |  | 167,704 |  | 1,088,056 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 184,067 |  | 151,486 |  | 124,921 |  | 100,532 |  | 78,153 |  | 61,876 |  | 46,158 |  | 36,615 |  | 27,505 |  | 20,813 |
| Refunds |  | 6,645 |  | 8,541 |  | 9,028 |  | 8,677 |  | 11,214 |  | 8,181 |  | 10,947 |  | 7,223 |  | 7,639 |  | 7,995 |
| Transfers |  | 705 |  | 238 |  | 24 |  | 226 |  | 282 |  | 147 |  | 205 |  | 1,146 |  | 49 |  | 32 |
| Administrative Expenses |  | 5,305 |  | 4,668 |  | 4,192 |  | 2,566 |  | 3,672 |  | 3,309 |  | 3,416 |  | 2,288 |  | 2,298 |  | 2,073 |
| Total Deductions |  | 196,722 |  | 164,933 |  | 138,165 |  | 112,001 |  | 93,321 |  | 73,513 |  | 60,726 |  | 47,272 |  | 37,491 |  | 30,913 |
| Total Changes in Fiduciary Net Position | \$ | 377,711 | \$ | 582,393 | \$ | 1,613,869 | \$ | 996,694 | \$ | 274,610 | \$ | 1,284,426 | \$ | 772,777 | \$ | $(1,007,550)$ | \$ | 130,213 | \$ | 1,057,143 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 9,833,649 |  | 9,251,256 |  | 7,637,387 |  | 6,640,693 |  | 6,366,083 |  | 5,081,657 |  | 4,308,880 |  | 5,316,430 |  | 5,186,217 |  | 4,129,074 |
| End of Year | \$ | 10,211,360 | \$ | 9,833,649 | \$ | 9,251,256 | \$ | 7,637,387 | \$ | 6,640,693 | \$ | 6,366,083 | \$ | 5,081,657 | \$ | 4,308,880 | \$ | 5,316,430 | \$ | 5,186,217 |
| Employer Contributions: <br> \% of Covered Payroll |  | 5.1\% |  | 5.1\% |  | 5.1\% |  | 5.1\% |  | 5.1\% |  | 5.2\% |  | 5.1\% |  | 5.3\% |  | 5.5\% |  | 4.8\% |

${ }^{1}$ "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)

| WSPRS Plan $1 / 2$ <br> Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 7,044 | \$ | 6,679 | \$ | 6,587 | \$ | 6,478 | \$ | 6,454 | \$ | 5,251 | , | 5,271 | \$ | 6,371 | \$ | 6,064 | \$ | 3,278 |
| Employee Contributions |  | 5,895 |  | 5,561 |  | 5,489 |  | 5,396 |  | 5,376 |  | 4,166 |  | 4,173 |  | 5,501 |  | 5,239 |  | 3,278 |
| Investment Income (Loss) ${ }^{1}$ |  | 25,354 |  | 49,046 |  | 176,856 |  | 106,664 |  | 11,481 |  | 158,571 |  | 91,335 |  | $(210,676)$ |  | $(10,992)$ |  | 171,393 |
| Transfers |  | 429 |  | 293 |  | 510 |  | 574 |  | 54 |  | 415 |  | 10 |  | 331 |  | 89 |  | 163 |
| Miscellaneous ${ }^{2}$ |  | 3,437 |  | 1,179 |  | 1,467 |  | 1,692 |  | 2,010 |  | 1,385 |  | 1,399 |  | 500 |  | 478 |  | 385 |
| Total Additions |  | 42,159 |  | 62,758 |  | 190,909 |  | 120,804 |  | 25,375 |  | 169,788 |  | 102,188 |  | $(197,973)$ |  | 878 |  | 178,497 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 53,651 |  | 49,772 |  | 47,143 |  | 43,521 |  | 40,368 |  | 38,387 |  | 36,116 |  | 34,522 |  | 32,963 |  | 31,393 |
| Refunds |  | 508 |  | 303 |  | 367 |  | 304 |  | 262 |  | 315 |  | 127 |  | 211 |  | 269 |  | 291 |
| Transfers |  | 76 |  | - |  | - |  | 88 |  | 32 |  | 22 |  | 14 |  | 160 |  | 8 |  | - |
| Administrative Expenses |  | 448 |  | 425 |  | 431 |  | 538 |  | 392 |  | 356 |  | 364 |  | 354 |  | 391 |  | 381 |
| Total Deductions |  | 54,683 |  | 50,500 |  | 47,941 |  | 44,451 |  | 41,054 |  | 39,080 |  | 36,621 |  | 35,247 |  | 33,631 |  | 32,065 |
| Total Changes in Fiduciary Net Position | \$ | $(12,524)$ | \$ | 12,258 | \$ | 142,968 | \$ | 76,353 | \$ | $(15,679)$ | \$ | 130,708 | \$ | 65,567 | \$ | $(233,220)$ | \$ | $(32,753)$ | \$ | 146,432 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 1,110,799 |  | 1,098,541 |  | 955,573 |  | 879,220 |  | 894,899 |  | 764,191 |  | 698,624 |  | 931,844 |  | 964,597 |  | 818,165 |
| End of Year | \$ | 1,098,275 | \$ | 1,110,799 | \$ | 1,098,541 | \$ | 955,573 | \$ | 879,220 | \$ | 894,899 | \$ | 764,191 | \$ | 698,624 | \$ | 931,844 | \$ | 964,597 |
| Employer Contributions: \% of Covered Payroll |  | 8.1\% |  | 7.9\% |  | 7.9\% |  | 7.9\% |  | 7.9\% |  | 6.4\% |  | 6.4\% |  | 7.7\% |  | 7.7\% |  | 4.5\% |

${ }^{1}$ "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2"Miscellaneous additions" include restorations of employee contributions.
$\stackrel{\Phi}{\Phi}$ Schedule of Changes in Fiduciary Net Position (cont.)

| JRS <br> Dollars in Thousands | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | - | \$ | - | \$ | - | \$ | 12 | \$ | 31 | \$ | 46 | \$ | 79 | \$ | 105 | \$ | 112 | \$ | 111 |
| Employee Contributions |  | - |  | - |  | - |  | 12 |  | 31 |  | 46 |  | 79 |  | 104 |  | 112 |  | 111 |
| State Contributions |  | 9,500 |  | 10,600 |  | 10,600 |  | 10,100 |  | 8,100 |  | 10,860 |  | 11,570 |  | 10,200 |  | 9,600 |  | 9,539 |
| Investment Income (Loss) ${ }^{1}$ |  | 78 |  | 39 |  | 26 |  | (11) |  | 13 |  | 8 |  | 11 |  | 48 |  | 98 |  | 139 |
| Transfers |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Miscellaneous ${ }^{2}$ |  | 3 |  | 2 |  | 2 |  | 2 |  | 1 |  | 2 |  | 2 |  | 1 |  | 1 |  | - |
| Total Additions |  | 9,581 |  | 10,641 |  | 10,628 |  | 10,115 |  | 8,176 |  | 10,962 |  | 11,741 |  | 10,458 |  | 9,923 |  | 9,900 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 9,131 |  | 9,336 |  | 9,480 |  | 9,697 |  | 9,764 |  | 9,738 |  | 9,723 |  | 9,583 |  | 9,514 |  | 9,356 |
| Refunds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 7 |  | - |  | - |
| Transfers |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Administrative Expenses |  | 2 |  | 2 |  | 2 |  | 2 |  | 2 |  | 2 |  | 2 |  | 1 |  | - |  | - |
| Total Deductions |  | 9,133 |  | 9,338 |  | 9,482 |  | 9,699 |  | 9,766 |  | 9,740 |  | 9,725 |  | 9,591 |  | 9,514 |  | 9,356 |
| Total Changes in Fiduciary Net Position | \$ | 448 | \$ | 1,303 | \$ | 1,146 | \$ | 416 | \$ | $(1,590)$ | \$ | 1,222 | \$ | 2,016 | \$ | 867 | \$ | 409 | \$ | 544 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 6,336 |  | 5,033 |  | 3,887 |  | 3,471 |  | 5,061 |  | 3,839 |  | 1,823 |  | 956 |  | 547 |  | 3 |
| End of Year | \$ | 6,784 | \$ | 6,336 | \$ | 5,033 | \$ | 3,887 | \$ | 3,471 | \$ | 5,061 | \$ | 3,839 | \$ | 1,823 | \$ | 956 | \$ | 547 |
| Employer Contributions: \% of Covered Payroll |  | n/a |  | n/a |  | n/a |  | 7.5\% |  | 7.5\% |  | 7.5\% |  | 7.5\% |  | 7.5\% |  | 7.5\% |  | 7.5\% |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2 "Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)

| JRF <br> Dollars in Thousands | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Additions by Source |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Employee Contributions |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| State Contributions |  | 501 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 300 |
| Investment Income (Loss) ${ }^{1}$ |  | 7 |  | 4 |  | 8 |  | (5) |  | 19 |  | 11 |  | 48 |  | 141 |  | 179 |  | 184 |
| Transfers |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Miscellaneous ${ }^{2}$ |  | - |  | - |  | - |  | - |  | 1 |  | 1 |  | 1 |  | 2 |  | 1 |  | 2 |
| Total Additions |  | 508 |  | 4 |  | 8 |  | (5) |  | 20 |  | 12 |  | 49 |  | 143 |  | 180 |  | 486 |
| Deductions by Type |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Benefits |  | 440 |  | 444 |  | 444 |  | 474 |  | 482 |  | 499 |  | 500 |  | 501 |  | 545 |  | 581 |
| Refunds |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Transfers |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | 1 |  | - |  | - |
| Administrative Expenses |  | 1 |  | - |  | - |  | 1 |  | 1 |  | 1 |  | 1 |  | 1 |  | 2 |  | 1 |
| Total Deductions |  | 441 |  | 444 |  | 444 |  | 475 |  | 483 |  | 500 |  | 501 |  | 503 |  | 547 |  | 582 |
| Total Changes in Fiduciary Net Position | \$ | 67 | \$ | (440) | \$ | (436) | \$ | (480) | \$ | (463) | \$ | (488) | \$ | (452) | \$ | (360) | \$ | (367) | \$ | (96) |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 516 |  | 956 |  | 1,392 |  | 1,872 |  | 2,335 |  | 2,823 |  | 3,275 |  | 3,635 |  | 4,002 |  | 4,098 |
| End of Year | \$ | 583 | \$ | 516 | \$ | 956 | \$ | 1,392 | \$ | 1,872 | \$ | 2,335 | \$ | 2,823 | \$ | 3,275 | \$ | 3,635 | \$ | 4,002 |
| Employer Contributions: \% of Covered Payroll |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |  | n/a |

1 "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2 "Miscellaneous additions" include restorations of employee contributions.
$\overrightarrow{\mathrm{a}}$ Schedule of Changes in Fiduciary Net Position (cont.)

${ }^{1}$ "Investment income" reflects dividends, interest, realized capital gains, and unrealized gains and losses.
2 "Miscellaneous additions" include restorations of employee contributions.

Schedule of Changes in Fiduciary Net Position (cont.)


Distribution of Membership by System and Plan
Active Members
For the Years Ended June 30, 2008-2015, and September 30, 2006-2007

| Plan |  | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PERS 1 | \% | 1.30\% | 1.61\% | 1.94\% | 2.29\% | 2.64\% | 3.03\% | 3.43\% | 3.86\% | 4.41\% | 4.85\% |
|  | Individuals | 3,927 | 4,782 | 5,653 | 6,635 | 7,733 | 9,007 | 10,354 | 11,663 | 12,975 | 14,213 |
|  | Avg. Age | 64 | 63 | 62 | 61 | 61 | 60 | 59 | 59 | 58 | 57 |
| PERS 2 | \% | 39.09\% | 39.47\% | 39.73\% | 40.00\% | 39.92\% | 40.27\% | 40.35\% | 40.81\% | 41.00\% | 40.39\% |
|  | Individuals | 117,768 | 116,985 | 115,751 | 115,877 | 117,096 | 119,826 | 121,800 | 123,285 | 120,625 | 118,341 |
|  | Avg. Age | 48 | 48 | 48 | 48 | 48 | 48 | 47 | 47 | 46 | 46 |
| PERS 3 | \% | 10.49\% | 10.36\% | 10.06\% | 9.69\% | 9.41\% | 9.31\% | 8.97\% | 8.85\% | 8.30\% | 7.67\% |
|  | Individuals | 31,602 | 30,694 | 29,302 | 28,078 | 27,588 | 27,693 | 27,081 | 26,720 | 24,422 | 22,473 |
|  | Avg. Age | 43 | 43 | 44 | 44 | 43 | 43 | 42 | 42 | 42 | 42 |
| SERS 2 | \% | 8.12\% | 7.75\% | 7.47\% | 7.20\% | 7.09\% | 6.84\% | 6.69\% | 6.38\% | 6.04\% | 6.30\% |
|  | Individuals | 24,479 | 22,950 | 21,760 | 20,846 | 20,784 | 20,358 | 20,197 | 19,264 | 17,767 | 18,464 |
|  | Avg. Age | 50 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 |
| SERS 3 | \% | 10.40\% | 10.40\% | 10.48\% | 10.60\% | 10.76\% | 10.75\% | 10.69\% | 10.76\% | 11.24\% | 11.04\% |
|  | Individuals | 31,326 | 30,832 | 30,535 | 30,712 | 31,548 | 31,981 | 32,277 | 32,510 | 33,058 | 32,354 |
|  | Avg. Age | 50 | 51 | 51 | 50 | 50 | 49 | 49 | 48 | 47 | 47 |
| PSERS 2 | \% | 1.73\% | 1.63\% | 1.55\% | 1.47\% | 1.43\% | 1.42\% | 1.44\% | 1.32\% | 0.94\% | 0.71\% |
|  | Individuals | 5,202 | 4,820 | 4,513 | 4,250 | 4,187 | 4,210 | 4,340 | 3,981 | 2,755 | 2,073 |
|  | Avg. Age | 40 | 40 | 40 | 40 | 40 | 39 | 38 | 37 | 38 | 39 |
| TRS 1 | \% | 0.45\% | 0.62\% | 0.82\% | 1.04\% | 1.27\% | 1.54\% | 1.72\% | 2.01\% | 2.15\% | 2.52\% |
|  | Individuals | 1,353 | 1,824 | 2,393 | 3,019 | 3,740 | 4,591 | 5,204 | 6,061 | 6,331 | 7,382 |
|  | Avg. Age | 65 | 64 | 63 | 62 | 62 | 61 | 60 | 59 | 58 | 58 |
| TRS 2 | \% | 5.09\% | 4.60\% | 4.14\% | 3.74\% | 3.51\% | 3.17\% | 3.04\% | 2.68\% | 2.30\% | 2.38\% |
|  | Individuals | 15,342 | 13,632 | 12,071 | 10,849 | 10,285 | 9,442 | 9,174 | 8,103 | 6,752 | 6,983 |
|  | Avg. Age | 42 | 43 | 44 | 46 | 46 | 48 | 48 | 49 | 52 | 51 |
| TRS 3 | \% | 17.30\% | 17.50\% | 17.67\% | 17.77\% | 17.79\% | 17.57\% | 17.56\% | 17.33\% | 17.63\% | 18.22\% |
|  | Individuals | 52,125 | 51,837 | 51,471 | 51,489 | 52,178 | 52,292 | 53,010 | 52,360 | 51,856 | 53,371 |
|  | Avg. Age | 46 | 46 | 46 | 46 | 45 | 45 | 44 | 43 | 43 | 42 |
| LEOFF 1 | \% | 0.03\% | 0.04\% | 0.05\% | 0.06\% | 0.08\% | 0.10\% | 0.12\% | 0.14\% | 0.17\% | 0.20\% |
|  | Individuals | 82 | 120 | 143 | 186 | 250 | 301 | 356 | 421 | 513 | 596 |
|  | Avg. Age | 64 | 63 | 62 | 61 | 60 | 60 | 59 | 58 | 57 | 56 |
| LEOFF 2 | \% | 5.65\% | 5.66\% | 5.73\% | 5.77\% | 5.73\% | 5.64\% | 5.62\% | 5.50\% | 5.47\% | 5.37\% |
|  | Individuals | 17,019 | 16,773 | 16,687 | 16,720 | 16,805 | 16,775 | 16,951 | 16,626 | 16,099 | 15,718 |
|  | Avg. Age | 44 | 44 | 44 | 43 | 43 | 42 | 42 | 41 | 41 | 41 |
| WSPRS 1 | \% | 0.19\% | 0.21\% | 0.22\% | 0.25\% | 0.26\% | 0.27\% | 0.28\% | 0.28\% | 0.30\% | 0.31\% |
|  | Individuals | 560 | 609 | 657 | 712 | 767 | 806 | 830 | 851 | 885 | 906 |
|  | Avg. Age | 47 | 46 | 46 | 45 | 45 | 44 | 43 | 42 | 41 | 41 |
| WSPRS 2 | \% | 0.16\% | 0.15\% | 0.14\% | 0.12\% | 0.11\% | 0.09\% | 0.09\% | 0.08\% | 0.05\% | 0.04\% |
|  | Individuals | 475 | 435 | 409 | 354 | 315 | 281 | 264 | 234 | 152 | 116 |
|  | Avg. Age | 33 | 33 | 33 | 32 | 32 | 32 | 31 | 30 | 31 | 30 |
| JRS | \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Individuals | - | - | - | 2 | 3 | 5 | 9 | 10 | 11 | 11 |
|  | Avg. Age | n/a | n/a | n/a | 66 | 69 | 69 | 69 | 67 | 66 | 66 |
| JRF | \% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% |
|  | Individuals | - | - | - | - | - | - | - | - | - | - |
|  | Avg. Age | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Totals | \% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
|  | Individuals | 301,260 | 296,293 | 291,345 | 289,729 | 293,279 | 297,568 | 301,847 | 302,089 | 294,201 | 293,001 |

## Distribution of Membership by System and Plan (cont.)

## Inactive and Retired Members

For the Years Ended June 30, 2008-2015, and September 30, 2006-2007

| Plan |  | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PERS 1 | \% | 23.10\% | 24.57\% | 26.14\% | 27.70\% | 29.18\% | 30.63\% | 31.87\% | 33.11\% | 34.34\% | 35.47\% |
|  | Individuals | 51,269 | 52,248 | 53,244 | 54,266 | 55,053 | 55,721 | 56,272 | 56,852 | 57,342 | 57,509 |
|  | Avg. Age | 75 | 75 | 74 | 74 | 74 | 74 | 73 | 73 | 73 | 73 |
| PERS 2 | \% | 29.52\% | 28.73\% | 27.84\% | 26.93\% | 26.06\% | 25.04\% | 24.14\% | 23.23\% | 22.34\% | 21.88\% |
|  | Individuals | 65,523 | 61,105 | 56,712 | 52,773 | 49,167 | 45,556 | 42,614 | 39,890 | 37,302 | 35,485 |
|  | Avg. Age | 64 | 63 | 63 | 62 | 62 | 61 | 60 | 60 | 59 | 59 |
| PERS 3 | \% | 3.67\% | 3.39\% | 3.15\% | 2.92\% | 2.69\% | 2.46\% | 2.29\% | 2.12\% | 1.91\% | 1.74\% |
|  | Individuals | 8,147 | 7,209 | 6,419 | 5,718 | 5,068 | 4,482 | 4,045 | 3,647 | 3,183 | 2,817 |
|  | Avg. Age | 60 | 59 | 58 | 57 | 56 | 55 | 54 | 53 | 52 | 51 |
| SERS 2 | \% | 5.47\% | 5.25\% | 5.04\% | 4.81\% | 4.61\% | 4.44\% | 4.26\% | 3.99\% | 3.61\% | 3.36\% |
|  | Individuals | 12,134 | 11,153 | 10,274 | 9,429 | 8,697 | 8,069 | 7,514 | 6,845 | 6,019 | 5,442 |
|  | Avg. Age | 64 | 63 | 62 | 62 | 61 | 60 | 58 | 58 | 57 | 56 |
| SERS 3 | \% | 5.97\% | 5.55\% | 5.10\% | 4.67\% | 4.24\% | 3.86\% | 3.57\% | 3.28\% | 2.87\% | 2.60\% |
|  | Individuals | 13,241 | 11,788 | 10,393 | 9,142 | 7,993 | 7,015 | 6,308 | 5,628 | 4,796 | 4,210 |
|  | Avg. Age | 62 | 62 | 61 | 60 | 60 | 59 | 58 | 57 | 56 | 56 |
| PSERS 2 | \% | 0.17\% | 0.13\% | 0.08\% | 0.04\% | 0.01\% | 0.01\% | 0.00\% | 0.00\% | - | - |
|  | Individuals | 374 | 275 | 162 | 87 | 16 | 7 | 2 | 1 | - | - |
|  | Avg. Age | 47 | 46 | 47 | 48 | 59 | 58 | 63 | 66 | - | - |
| TRS 1 | \% | 16.00\% | 16.92\% | 17.82\% | 18.65\% | 19.45\% | 20.18\% | 20.88\% | 21.45\% | 22.41\% | 22.80\% |
|  | Individuals | 35,506 | 35,962 | 36,303 | 36,531 | 36,699 | 36,716 | 36,875 | 36,839 | 37,420 | 36,969 |
|  | Avg. Age | 75 | 74 | 74 | 73 | 73 | 72 | 72 | 71 | 71 | 71 |
| TRS 2 | \% | 3.03\% | 2.94\% | 2.84\% | 2.76\% | 2.69\% | 2.63\% | 2.59\% | 2.57\% | 2.57\% | 2.54\% |
|  | Individuals | 6,733 | 6,251 | 5,775 | 5,408 | 5,080 | 4,787 | 4,576 | 4,418 | 4,288 | 4,116 |
|  | Avg. Age | 66 | 65 | 65 | 64 | 63 | 62 | 61 | 60 | 59 | 58 |
| TRS 3 | \% | 7.08\% | 6.47\% | 5.88\% | 5.37\% | 4.84\% | 4.41\% | 4.04\% | 3.84\% | 3.48\% | 3.07\% |
|  | Individuals | 15,712 | 13,749 | 11,965 | 10,524 | 9,134 | 8,017 | 7,136 | 6,592 | 5,811 | 4,978 |
|  | Avg. Age | 61 | 61 | 60 | 59 | 58 | 58 | 57 | 56 | 55 | 54 |
| LEOFF 1 | \% | 3.38\% | 3.58\% | 3.80\% | 4.00\% | 4.20\% | 4.40\% | 4.58\% | 4.74\% | 4.89\% | 5.04\% |
|  | Individuals | 7,507 | 7,607 | 7,730 | 7,845 | 7,933 | 8,009 | 8,089 | 8,135 | 8,165 | 8,177 |
|  | Avg. Age | 73 | 72 | 72 | 71 | 70 | 70 | 69 | 68 | 68 | 67 |
| LEOFF 2 | \% | 2.02\% | 1.87\% | 1.71\% | 1.55\% | 1.42\% | 1.33\% | 1.16\% | 1.04\% | 0.93\% | 0.85\% |
|  | Individuals | 4,495 | 3,984 | 3,480 | 3,033 | 2,670 | 2,420 | 2,039 | 1,783 | 1,553 | 1,376 |
|  | Avg. Age | 59 | 58 | 58 | 57 | 56 | 55 | 54 | 54 | 53 | 52 |
| WSPRS 1 | \% | 0.52\% | 0.53\% | 0.53\% | 0.53\% | 0.53\% | 0.53\% | 0.54\% | 0.55\% | 0.56\% | 0.56\% |
|  | Individuals | 1,156 | 1,120 | 1,083 | 1,035 | 992 | 970 | 956 | 947 | 933 | 918 |
|  | Avg. Age | 66 | 66 | 66 | 66 | 65 | 65 | 65 | 64 | 64 | 64 |
| WSPRS 2 | \% | 0.01\% | 0.01\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | 0.00\% | - |
|  | Individuals | 20 | 15 | 10 | 8 | 6 | 6 | 4 | 2 | 1 | - |
|  | Avg. Age | 38 | 38 | 36 | 36 | 37 | 35 | 33 | 32 | 29 | - |
| JRS | \% | 0.05\% | 0.05\% | 0.06\% | 0.06\% | 0.07\% | 0.07\% | 0.07\% | 0.07\% | 0.08\% | 0.08\% |
|  | Individuals | 106 | 108 | 114 | 119 | 124 | 125 | 124 | 128 | 131 | 133 |
|  | Avg. Age | 81 | 80 | 80 | 80 | 80 | 79 | 79 | 79 | 78 | 77 |
| JRF | \% | 0.01\% | 0.01\% | 0.01\% | 0.01\% | 0.01\% | 0.01\% | 0.01\% | 0.01\% | 0.01\% | 0.01\% |
|  | Individuals | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 15 | 15 |
|  | Avg. Age | 85 | 84 | 83 | 83 | 83 | 82 | 81 | 80 | 79 | 79 |
| Totals | \% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% | 100.00\% |
|  | Individuals | 221,935 | 212,586 | 203,676 | 195,930 | 188,645 |  | 176,567 |  | 166,959 | 162,145 |

Source: Office of the State Actuary
Figures are as of the latest valuation date for each year.

## Principal Participating Employers by Plan

## PERS Plan 1

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | \% of Total Plan | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| State of Washington ${ }^{1}$ | 1,446 | 1 | 44.1\% | State of Washington | 6,715 | 1 | 49.3\% |
| King County | 193 | 2 | 5.9\% | KC Metro | 383 | 2 | 2.8\% |
| Seattle SD 001 | 74 | 3 | 2.3\% | King County | 382 | 3 | 2.8\% |
| Snohomish County | 39 | 4 | 1.2\% | Seattle SD 001 | 201 | 4 | 1.5\% |
| Pierce County | 38 | 5 | 1.2\% | Pierce County | 160 | 5 | 1.2\% |
| Spokane Public Schools | 24 | 6 | 0.7\% | Snohomish County | 145 | 6 | 1.1\% |
| City of Everett | 20 | 7 | 0.6\% | Spokane County | 98 | 7 | 0.7\% |
| Spokane County | 20 | 8 | 0.6\% | Thurston County | 92 | 8 | 0.7\% |
| Tacoma SD 010 | 20 | 9 | 0.6\% | Spokane Public Schools | 86 | 9 | 0.6\% |
| Kent SD 415 | 18 | 10 | 0.5\% | Tacoma SD 010 | 86 | 10 | 0.6\% |
| All Other Employers ${ }^{2}$ | 1,390 |  | 42.3\% | All Other Employers | 5,283 |  | 38.7\% |
| Total (435 Employers) | 3,282 |  | 100.0\% | Total (650 Employers) | 13,631 |  | 100.0\% |
| All Other Employers | Number | Employees | ${ }^{1}$ Includes 115 component units of the state |  |  |  |  |
| State of Washington | - | - | ${ }^{2}$ In 2016, "all other employers" consisted of the employers at left. |  |  |  |  |
| School Districts | 187 | 735 |  |  |  |  |  |
| Counties/Municipalities | 118 | 382 |  |  |  |  |  |
| Other Political Subdivisions | 120 | 273 |  |  |  |  |  |
| Total | 425 | 1,390 |  |  |  |  |  |

## PERS Plan 2

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | \% of Total Plan | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| State of Washington ${ }^{1}$ | 63,186 | 1 | 51.8\% | State of Washington | 68,131 | 1 | 53.1\% |
| King County | 10,131 | 2 | 8.3\% | King County | 4,746 | 2 | 3.7\% |
| Pierce County | 2,018 | 3 | 1.7\% | KC Metro | 4,453 | 3 | 3.5\% |
| Snohomish County | 1,861 | 4 | 1.5\% | Pierce County | 2,578 | 4 | 2.0\% |
| Spokane County | 1,331 | 5 | 1.1\% | Snohomish County | 2,330 | 5 | 1.8\% |
| Clark County | 1,129 | 6 | 0.9\% | Spokane County | 1,536 | 6 | 1.2\% |
| Snohomish County PUD 01 | 903 | 7 | 0.7\% | Clark County | 1,366 | 7 | 1.0\% |
| Port of Seattle | 879 | 8 | 0.7\% | King County Public Health Dept. | 1,177 | 8 | 0.9\% |
| City of Bellevue | 821 | 9 | 0.7\% | City of Bellevue | 908 | 9 | 0.7\% |
| Energy Northwest | 813 | 10 | 0.7\% | Kitsap County | 896 | 10 | 0.7\% |
| All Other Employers ${ }^{2}$ | 38,865 |  | 31.9\% | All Other Employers | 40,260 |  | 31.4\% |
| Total (794 Employers) | 121,937 |  | 100.0\% | Total (733 Employers) | 128,381 |  | 100.0\% |


| All Other Employers | Number | Employees | Includes 153 component units of the state |
| :---: | :---: | :---: | :---: |
| State of Washington | - | - | ${ }^{2}$ In 2016, "all other employers" consisted of the employers at left. |
| School Districts | - | - |  |
| Counties/Municipalities | 272 | 21,104 |  |
| Other Political Subdivisions | 512 | 17,761 |  |
| Total | 784 | 38,865 |  |

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## Principal Participating Employers by Plan (cont.)

## PERS Plan 3

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| State of Washington ${ }^{1}$ | 20,864 | 1 | 63.7\% | State of Washington | 16,870 | 1 | 63.4\% |
| King County | 1,961 | 2 | 6.0\% | King County | 758 | 2 | 2.8\% |
| Metropolitan Park Dist. of Tacoma | 461 | 3 | 1.4\% | KC Metro | 598 | 3 | 2.2\% |
| Pierce County | 452 | 4 | 1.4\% | Pierce County | 448 | 4 | 1.7\% |
| Snohomish County | 345 | 5 | 1.1\% | Energy Northwest | 337 | 5 | 1.3\% |
| Energy Northwest | 330 | 6 | 1.0\% | Snohomish County | 319 | 6 | 1.2\% |
| Spokane County | 243 | 7 | 0.7\% | King County Public Health Dept. | 269 | 7 | 1.0\% |
| Clark County | 230 | 8 | 0.7\% | Yakima County | 217 | 8 | 0.8\% |
| Port of Seattle | 209 | 9 | 0.6\% | Spokane County | 216 | 9 | 0.8\% |
| Kitsap County | 200 | 10 | 0.6\% | Clark County | 207 | 10 | 0.8\% |
| All Other Employers ${ }^{2}$ | 7,461 |  | 22.8\% | All Other Employers | 6,378 |  | 24.0\% |
| Total (543 Employers) | 32,756 |  | 100.0\% | Total (447 Employers) | 26,617 |  | 100.0\% |
| All Other Employers | Number | Employees | ${ }^{1}$ Includes 145 component units of the state |  |  |  |  |
| State of Washington | - | - | ${ }^{2}$ In 2016, "all other employers" consisted of the employers at left. |  |  |  |  |
| School Districts | - | - |  |  |  |  |  |
| Counties/Municipalities | 206 | 4,171 |  |  |  |  |  |
| Other Political Subdivisions | 327 | 3,290 |  |  |  |  |  |
| Total | 533 | 7,461 |  |  |  |  |  |

## SERS Plan 2

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| Seattle SD 001 | 1,264 | 1 | 4.5\% | Seattle SD 001 | 945 | 1 | 5.0\% |
| Tacoma SD 010 | 686 | 2 | 2.4\% | Tacoma SD 010 | 689 | 2 | 3.6\% |
| Highline SD 401 | 620 | 3 | 2.2\% | Spokane Public Schools | 507 | 3 | 2.6\% |
| Spokane Public Schools | 569 | 4 | 2.0\% | Vancouver SD 037 | 470 | 4 | 2.5\% |
| Kent SD 415 | 547 | 5 | 2.0\% | Kent SD 415 | 453 | 5 | 2.4\% |
| Vancouver SD 037 | 547 | 6 | 2.0\% | Highline SD 401 | 446 | 6 | 2.3\% |
| Bellevue SD 405 | 511 | 7 | 1.8\% | Federal Way SD 210 | 368 | 7 | 1.9\% |
| Evergreen SD 114 | 500 | 8 | 1.8\% | Edmonds SD 015 | 356 | 8 | 1.9\% |
| Puyallup SD 003 | 479 | 9 | 1.7\% | Lake Washington SD 414 | 321 | 9 | 1.7\% |
| Lake Washington SD 414 | 463 | 10 | 1.7\% | Northshore SD 417 | 318 | 10 | 1.7\% |
| All Other Employers ${ }^{1}$ | 21,750 |  | 77.9\% | All Other Employers | 14,172 |  | 74.4\% |
| Total (307 Employers) | 27,936 |  | 100.0\% | Total (303 Employers) | 19,045 |  | 100.0\% |


| All Other Employers | Number | Employees |
| :--- | ---: | ---: |
| State of Washington | - | - |
| School Districts | 297 | 21,750 |
| Counties/Municipalities | - | - |
| Other Political Subdivisions | - | - |
| Total | $\mathbf{2 9 7}$ | $\mathbf{2 1 , 7 5 0}$ |

## Principal Participating Employers by Plan (cont.)

## SERS Plan 3

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| Seattle SD 001 | 1,246 | 1 | 3.7\% | Seattle SD 001 | 1,102 | 1 | 3.1\% |
| Kent SD 415 | 980 | 2 | 2.9\% | Kent SD 415 | 1,054 | 2 | 2.9\% |
| Spokane Public Schools | 823 | 3 | 2.5\% | Spokane Public Schools | 926 | 3 | 2.6\% |
| Evergreen SD 114 | 809 | 4 | 2.4\% | Evergreen SD 114 | 916 | 4 | 2.6\% |
| Tacoma SD 010 | 781 | 5 | 2.3\% | Tacoma SD 010 | 770 | 5 | 2.2\% |
| Lake Washington SD 414 | 750 | 6 | 2.2\% | Vancouver SD 037 | 764 | 6 | 2.1\% |
| Vancouver SD 037 | 732 | 7 | 2.2\% | Lake Washington SD 414 | 743 | 7 | 2.1\% |
| Edmonds SD 015 | 708 | 8 | 2.1\% | Northshore SD 417 | 703 | 8 | 2.0\% |
| Federal Way SD 210 | 662 | 9 | 2.0\% | Federal Way SD 210 | 700 | 9 | 2.0\% |
| Northshore SD 417 | 659 | 10 | 2.0\% | Edmonds SD 015 | 693 | 10 | 1.9\% |
| All Other Employers ${ }^{1}$ | 25,362 |  | 75.7\% | All Other Employers | 27,232 |  | 76.5\% |
| Total (306 Employers) | 33,512 |  | 100.0\% | Total (302 Employers) | 35,603 |  | 100.0\% |
| All Other Employers | Number | Employees | ${ }^{1}$ In 2016, "all other employers" consisted of the employers at left. |  |  |  |  |
| State of Washington | - | - |  |  |  |  |  |
| School Districts | 296 | 25,362 |  |  |  |  |  |
| Counties/Municipalities | - | - |  |  |  |  |  |
| Other Political Subdivisions | - | - |  |  |  |  |  |
| Total | 296 | 25,362 |  |  |  |  |  |

## PSERS Plan 2

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | \% of Total Plan | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| State of Washington ${ }^{1}$ | 3,061 | 1 | 55.6\% | State of Washington | 1,035 | 1 | 44.8\% |
| King County | 387 | 2 | 7.0\% | King County | 238 | 2 | 10.3\% |
| Pierce County | 231 | 3 | 4.2\% | Pierce County | 138 | 3 | 6.0\% |
| Snohomish County | 212 | 4 | 3.8\% | Snohomish County | 98 | 4 | 4.2\% |
| Spokane County | 172 | 5 | 3.1\% | Thurston County | 86 | 5 | 3.7\% |
| Thurston County | 125 | 6 | 2.3\% | Spokane County | 74 | 6 | 3.2\% |
| South Correctional Entity | 119 | 7 | 2.2\% | Kitsap County | 56 | 7 | 2.4\% |
| Benton County | 101 | 8 | 1.8\% | Yakima County | 56 | 8 | 2.4\% |
| Clark County | 97 | 9 | 1.8\% | Benton County | 55 | 9 | 2.4\% |
| Yakima County | 94 | 10 | 1.7\% | Cowlitz County | 51 | 10 | 2.2\% |
| All Other Employers ${ }^{2}$ | 911 |  | 16.5\% | All Other Employers | 425 |  | 18.4\% |
| Total (66 Employers) | 5,510 |  | 100.0\% | Total (61 Employers) | 2,312 |  | 100.0\% |


| All Other Employers | Number | Employees |
| :--- | ---: | ---: |
| State of Washington | - | - |
| School Districts | - | - |
| Counties/Municipalities | 56 | 911 |
| Other Political Subdivisions | - | - |
| Total | $\mathbf{5 6}$ | $\mathbf{9 1 1}$ |

${ }^{1}$ Includes six component units of the state
${ }^{2}$ In 2016, "all other employers" consisted of the employers at left.

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## Principal Participating Employers by Plan (cont.)

## TRS Plan 1

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ | Employer | Covered Employees | Rank | \% of Total Plan |
| Seattle SD 001 | 54 | 1 | 5.5\% | Seattle SD 001 | 420 | 1 | 5.7\% |
| State of Washington ${ }^{1}$ | 52 | 2 | 5.3\% | State of Washington | 407 | 2 | 5.6\% |
| Tacoma SD 010 | 37 | 3 | 3.8\% | Tacoma SD 010 | 273 | 3 | 3.7\% |
| Lake Washington SD 414 | 27 | 4 | 2.7\% | Spokane Public Schools | 216 | 4 | 3.0\% |
| Northshore SD 417 | 26 | 5 | 2.6\% | Lake Washington SD 414 | 183 | 5 | 2.5\% |
| Spokane Public Schools | 25 | 6 | 2.5\% | Northshore SD 417 | 183 | 6 | 2.5\% |
| Evergreen SD 114 | 20 | 7 | 2.0\% | Evergreen SD 114 | 144 | 7 | 2.0\% |
| Everett SD 002 | 18 | 8 | 1.8\% | Vancouver SD 037 | 137 | 8 | 1.9\% |
| Highline SD 401 | 17 | 9 | 1.7\% | Kent SD 415 | 135 | 9 | 1.8\% |
| Olympia SD 111 | 17 | 10 | 1.7\% | Edmonds SD 015 | 124 | 10 | 1.7\% |
| All Other Employers ${ }^{2}$ | 696 |  | 70.4\% | All Other Employers | 5,093 |  | 69.6\% |
| Total (190 Employers) | 989 |  | 100.0\% | Total (289 Employers) | 7,315 |  | 100.0\% |
| All Other Employers | Number | Employees | ${ }^{1}$ Includes 31 component units of the state |  |  |  |  |
| State of Washington | - | - | ${ }^{2}$ In 2016, "all other employers" consisted of the employers at left. |  |  |  |  |
| School Districts | 180 | 696 |  |  |  |  |  |
| Counties/Municipalities | - | - |  |  |  |  |  |
| Other Political Subdivisions | - | - |  |  |  |  |  |
| Total | 180 | 696 |  |  |  |  |  |

## TRS Plan 2

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| Seattle SD 001 | 1,363 | 1 | 7.2\% | Seattle SD 001 | 527 | 1 | 6.0\% |
| Tacoma SD 010 | 552 | 2 | 2.9\% | Tacoma SD 010 | 387 | 2 | 4.4\% |
| Kent SD 415 | 473 | 3 | 2.5\% | Spokane Public Schools | 303 | 3 | 3.4\% |
| Lake Washington SD 414 | 467 | 4 | 2.5\% | Vancouver SD 037 | 204 | 4 | 2.3\% |
| Highline SD 401 | 463 | 5 | 2.5\% | Bellevue SD 405 | 200 | 5 | 2.3\% |
| Spokane Public Schools | 461 | 6 | 2.4\% | Evergreen SD 114 | 194 | 6 | 2.2\% |
| Evergreen SD 114 | 454 | 7 | 2.4\% | Kent SD 415 | 191 | 7 | 2.2\% |
| Vancouver SD 037 | 435 | 8 | 2.3\% | Bethel SD 403 | 174 | 8 | 2.0\% |
| Federal Way SD 210 | 409 | 9 | 2.2\% | Everett SD 002 | 171 | 9 | 2.0\% |
| Bellevue SD 405 | 387 | 10 | 2.1\% | Issaquah SD 411 | 171 | 10 | 2.0\% |
| All Other Employers ${ }^{1}$ | 13,356 |  | 71.0\% | All Other Employers | 6,235 |  | 71.2\% |
| Total (306 Employers) | 18,820 |  | 100.0\% | Total (279 Employers) | 8,757 |  | 100.0\% |


| All Other Employers | Number | Employees |
| :--- | ---: | ---: |
| State of Washington ${ }^{2}$ | 1 | 85 |
| School Districts | 295 | 13,271 |
| Counties/Municipalities | - | - |
| Other Political Subdivisions | - | - |
| Total | $\mathbf{2 9 6}$ | $\mathbf{1 3 , 3 5 6}$ |

${ }^{1}$ In 2016, "all other employers" consisted of the employers at left. ${ }^{2}$ Includes 28 component units of the state

## Principal Participating Employers by Plan (cont.)

## TRS Plan 3

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| Seattle SD 001 | 2,640 | 1 | 4.7\% | Seattle SD 001 | 2,541 | 1 | 4.6\% |
| Spokane Public Schools | 1,853 | 2 | 3.3\% | Spokane Public Schools | 1,762 | 2 | 3.2\% |
| Tacoma SD 010 | 1,616 | 3 | 2.9\% | Tacoma SD 010 | 1,542 | 3 | 2.8\% |
| Kent SD 415 | 1,496 | 4 | 2.7\% | Evergreen SD 114 | 1,527 | 4 | 2.7\% |
| Lake Washington SD 414 | 1,473 | 5 | 2.6\% | Kent SD 415 | 1,453 | 5 | 2.6\% |
| Evergreen SD 114 | 1,421 | 6 | 2.5\% | Lake Washington SD 414 | 1,301 | 6 | 2.4\% |
| Vancouver SD 037 | 1,217 | 7 | 2.2\% | Federal Way SD 210 | 1,277 | 7 | 2.3\% |
| Federal Way SD 210 | 1,203 | 8 | 2.2\% | Vancouver SD 037 | 1,185 | 8 | 2.1\% |
| Bellevue SD 405 | 1,114 | 9 | 2.0\% | Edmonds SD 015 | 1,136 | 9 | 2.1\% |
| Edmonds SD 015 | 1,107 | 10 | 2.0\% | Bellevue SD 405 | 1,114 | 10 | 2.0\% |
| All Other Employers ${ }^{1}$ | 40,768 |  | 72.9\% | All Other Employers | 40,462 |  | 73.2\% |
| Total (311 Employers) | 55,908 |  | 100.0\% | Total (304 Employers) | 55,300 |  | 100.0\% |
| All Other Employers | Number | Employees | ${ }^{1}$ In 2016, "all other employers" consisted of the employers at left. |  |  |  |  |
| State of Washington ${ }^{2}$ | 1 | 704 | ${ }^{2}$ Includes 48 component units of the state |  |  |  |  |
| School Districts | 300 | 40,064 |  |  |  |  |  |
| Counties/Municipalities | - | - |  |  |  |  |  |
| Other Political Subdivisions | - | - |  |  |  |  |  |
| Total | 301 | 40,768 |  |  |  |  |  |

## LEOFF Plan 1

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | \% of Total Plan | Employer | Covered Employees | Rank | \% of Total Plan |
| City of Seattle | 24 | 1 | 37.5\% | City of Seattle | 134 | 1 | 23.9\% |
| City of Bellevue | 3 | 2 | 4.7\% | City of Tacoma | 40 | 2 | 7.1\% |
| South King Fire \& Rescue | 3 | 3 | 4.7\% | City of Spokane | 38 | 3 | 6.8\% |
| Snohomish County FPD 01 | 3 | 4 | 4.7\% | City of Bellevue | 25 | 4 | 4.5\% |
| City of Everett | 2 | 5 | 3.1\% | City of Bellingham | 22 | 5 | 3.9\% |
| King County | 2 | 6 | 3.1\% | City of Everett | 17 | 6 | 3.0\% |
| City of Olympia | 2 | 7 | 3.1\% | King County | 16 | 7 | 2.9\% |
| City of Pasco | 2 | 8 | 3.1\% | Pierce County FPD 02 | 13 | 8 | 2.3\% |
| City of Spokane | 2 | 9 | 3.1\% | City of Renton | 12 | 9 | 2.1\% |
| Pierce County FPD 03 | 2 | 10 | 3.1\% | Spokane County | 12 | 10 | 2.1\% |
| All Other Employers ${ }^{1}$ | 19 |  | 29.8\% | All Other Employers | 232 |  | 41.4\% |
| Total (29 Employers) | 64 |  | 100.0\% | Total (95 Employers) | 561 |  | 100.0\% |


|  | Number | Employees |  |  |
| :--- | ---: | ---: | ---: | :--- |
| All Oth 2016, "all other employers" consisted of the employers at left. |  |  |  |  |
| State of Washington | - | - |  |  |
| School Districts | - | - |  |  |
| Counties/Municipalities | 16 | 16 |  |  |
| Other Political Subdivisions | 3 | 3 |  |  |
| Total | $\mathbf{1 9}$ | $\mathbf{1 9}$ |  |  |

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## Principal Participating Employers by Plan (cont.)

## LEOFF Plan 2

Current Year and Nine Years Prior

| For Fiscal Year Ended June 30, 2016 |  |  |  | 2007 (calendar year statistics) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ | Employer | Covered Employees | Rank | $\begin{array}{r} \text { \% of } \\ \text { Total Plan } \end{array}$ |
| City of Seattle | 2,346 | 1 | 13.4\% | City of Seattle | 2,172 | 1 | 13.5\% |
| King County | 764 | 2 | 4.4\% | King County | 755 | 2 | 4.7\% |
| City of Tacoma | 694 | 3 | 4.0\% | City of Tacoma | 744 | 3 | 4.6\% |
| City of Spokane | 598 | 4 | 3.4\% | City of Spokane | 520 | 4 | 3.3\% |
| City of Bellevue | 389 | 5 | 2.2\% | City of Vancouver | 373 | 5 | 2.3\% |
| City of Vancouver | 373 | 6 | 2.1\% | City of Bellevue | 339 | 6 | 2.1\% |
| City of Everett | 346 | 7 | 2.0\% | City of Everett | 333 | 7 | 2.1\% |
| Pierce County | 307 | 8 | 1.8\% | Pierce County | 323 | 8 | 2.0\% |
| Snohomish County | 277 | 9 | 1.6\% | City of Kent | 270 | 9 | 1.7\% |
| City of Renton | 254 | 10 | 1.4\% | Snohomish County | 260 | 10 | 1.6\% |
| All Other Employers ${ }^{1}$ | 11,122 |  | 63.7\% | All Other Employers | 9,965 |  | 62.1\% |
| Total (369 Employers) | 17,470 |  | 100.0\% | Total (375 Employers) | 16,054 |  | 100.0\% |
| All Other Employers | Number | Employees | ${ }^{1}$ In 2016, "all other employers" consisted of the employers at left. <br> ${ }^{2}$ Includes eight component units of the state |  |  |  |  |
| State of Washington ${ }^{2}$ | 1 | 247 |  |  |  |  |  |
| School Districts | - | - |  |  |  |  |  |
| Counties/Municipalities | 194 | 6,646 |  |  |  |  |  |
| Other Political Subdivisions | 164 | 4,229 |  |  |  |  |  |
| Total | 359 | 11,122 |  |  |  |  |  |

Number of Participating Employers

| PERS Plan l |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Fiscal Year Ended | Component Units <br> of WA State | Counties/ <br> Municipalities | School Districts | Other Political <br> Subdivisions | Total |
| $6 / 30 / 2016$ | 115 | 123 | 191 | 120 | 549 |
| $6 / 30 / 2015$ | 123 | 132 | 200 | 140 | 595 |
| $6 / 30 / 2014$ | 128 | 147 | 212 | 147 | 634 |
| $6 / 30 / 2013$ | 135 | 172 | 216 | 183 | 706 |
| $6 / 30 / 2012$ | 129 | 220 | 155 | 174 | 678 |
| $6 / 30 / 2011$ | 144 | 227 | 158 | 180 | 709 |
| $6 / 30 / 2010$ | 146 | 229 | 166 | 193 | 734 |
| $6 / 30 / 2009$ | 117 | 233 | 172 | 198 | 720 |
| $6 / 30 / 2008$ | 147 | 239 | 173 | 202 | 761 |
| $6 / 30 / 2007$ | 147 | 245 | 183 | 214 | 789 |

## PERS Plan 2

| Fiscal Year Ended | Component Units <br> of WA State | Counties/ <br> Municipalities | Other Political <br> School Districts <br> Subdivisions | Total |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2016$ | 153 | 278 | - | 515 | 946 |
| $6 / 30 / 2015$ | 157 | 276 | - | 510 | 943 |
| $6 / 30 / 2014$ | 169 | 275 | - | 490 | 934 |
| $6 / 30 / 2013$ | 167 | 276 | - | 491 | 934 |
| $6 / 30 / 2012$ | 169 | 274 | - | 494 | 937 |
| $6 / 30 / 2011$ | 179 | 271 | - | 494 | 944 |
| $6 / 30 / 2010$ | 178 | 270 | - | 485 | 933 |
| $6 / 30 / 2009$ | 177 | 271 | - | 484 | 932 |
| $6 / 30 / 2008$ | 176 | 272 | - | 475 | 923 |
| $6 / 30 / 2007$ | 175 | 271 | - | 464 | 910 |


| PERS Plan 3 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended | Component Units of WA State | Counties/ Municipalities | School Districts | Other Political Subdivisions | Total |
| 6/30/2016 | 145 | 212 | - | 330 | 687 |
| 6/30/2015 | 149 | 211 | - | 323 | 683 |
| 6/30/2014 | 158 | 209 | - | 306 | 673 |
| 6/30/2013 | 157 | 209 | - | 298 | 664 |
| 6/30/2012 | 157 | 206 | - | 300 | 663 |
| 6/30/2011 | 166 | 205 | - | 302 | 673 |
| 6/30/2010 | 163 | 209 | - | 287 | 659 |
| 6/30/2009 | 164 | 203 | - | 281 | 648 |
| 6/30/2008 | 162 | 199 | - | 265 | 626 |
| 6/30/2007 | 162 | 195 | - | 257 | 614 |

## Number of Participating Employers (cont.)

| SERS Plan 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended | Component Units of WA State | Counties/ Municipalities | School Districts | Other Political Subdivisions | Total |
| 6/30/2016 | - | - | 307 | - | 307 |
| 6/30/2015 | - | - | 302 | - | 302 |
| 6/30/2014 | - | - | 303 | - | 303 |
| 6/30/2013 | - | - | 302 | - | 302 |
| 6/30/2012 | - | - | 299 | - | 299 |
| 6/30/2011 | - | - | 299 | - | 299 |
| 6/30/2010 | - | - | 298 | - | 298 |
| 6/30/2009 | - | - | 298 | - | 298 |
| 6/30/2008 | - | - | 299 | - | 299 |
| 6/30/2007 | - | - | 292 | - | 292 |


| SERS Plan 3 |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Fiscal Year Ended | Component Units <br> of WA State | Counties/ <br> Municipalities | School Districts | Other Political <br> Subdivisions | Total |  |
| $6 / 30 / 2016$ | - | - | 306 | - | 306 |  |
| $6 / 30 / 2015$ | - | - | 300 | - | 300 |  |
| $6 / 30 / 2014$ | - | - | 300 | - | 300 |  |
| $6 / 30 / 2013$ | - | - | 301 | - | 301 |  |
| $6 / 30 / 2012$ | - | - | 301 | - | 301 |  |
| $6 / 30 / 2011$ | - | - | - | 300 | 300 |  |
| $6 / 30 / 2010$ | 1 | - | 300 | - | 301 |  |
| $6 / 30 / 2009$ | 1 | - | 301 | - | 302 |  |
| $6 / 30 / 2008$ | 1 | - | 303 | - | 304 |  |
| $6 / 30 / 2007$ | - | - | 294 | 294 |  |  |


| PSERS Plan 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended | Component Units of WA State | Counties/ Municipalities | School Districts | Other Political Subdivisions | Total |
| 6/30/2016 | 6 | 64 | - | 1 | 71 |
| 6/30/2015 | 9 | 65 | - | 1 | 75 |
| 6/30/2014 | 9 | 65 | - | 1 | 75 |
| 6/30/2013 | 9 | 65 | - | 1 | 75 |
| 6/30/2012 | 10 | 65 | - | 1 | 76 |
| 6/30/2011 | 11 | 65 | - | 1 | 77 |
| 6/30/2010 | 10 | 63 | - | - | 73 |
| 6/30/2009 | 10 | 63 | - | - | 73 |
| 6/30/2008 | 9 | 62 | - | - | 71 |
| 6/30/2007 | 8 | 61 | - | - | 69 |

Number of Participating Employers (cont.)

| TRS Plan 1 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended | Component Units of WA State | Counties/ Municipalities | School Districts | Other Political Subdivisions | Total |
| 6/30/2016 | 31 | - | 189 | - | 220 |
| 6/30/2015 | 34 | - | 217 | - | 251 |
| 6/30/2014 | 36 | - | 228 | - | 264 |
| 6/30/2013 | 49 | - | 295 | - | 344 |
| 6/30/2012 | 47 | - | 257 | - | 304 |
| 6/30/2011 | 49 | - | 263 | - | 312 |
| 6/30/2010 | 54 | - | 271 | - | 325 |
| 6/30/2009 | 62 | - | 274 | - | 336 |
| 6/30/2008 | 63 | - | 276 | - | 339 |
| 6/30/2007 | 67 | - | 286 | - | 353 |


| TRS Plan 2 |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Fiscal Year Ended | Component Units <br> of WA State | Counties/ <br> Municipalities | Other Political <br> School Districts | Subdivisions | Total |
| $6 / 30 / 2016$ | 28 | - | 305 | - | 333 |
| $6 / 30 / 2015$ | 26 | - | 295 | - | 321 |
| $6 / 30 / 2014$ | 22 | - | 295 | - | 317 |
| $6 / 30 / 2013$ | 36 | - | 304 | - | 340 |
| $6 / 30 / 2012$ | 24 | - | 295 | - | 319 |
| $6 / 30 / 2011$ | 25 | - | 288 | - | 313 |
| $6 / 30 / 2010$ | 23 | - | 283 | - | 306 |
| $6 / 30 / 2009$ | 21 | - | 282 | - | 303 |
| $6 / 30 / 2008$ | 22 | - | 277 | - | 299 |
| $6 / 30 / 2007$ | 22 | - | 275 | - | 297 |

## TRS Plan 3

| Fiscal Year Ended | Component Units <br> of WA State | Counties/ <br> Municipalities | Other Political <br> Subdivisions | Total |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2016$ | 40 | - | 310 | - | 350 |
| $6 / 30 / 2015$ | 41 | - | 303 | - | 344 |
| $6 / 30 / 2014$ | 39 | - | 302 | - | 341 |
| $6 / 30 / 2013$ | 38 | - | 303 | - | 341 |
| $6 / 30 / 2012$ | 35 | - | 302 | - | 337 |
| $6 / 30 / 2011$ | 28 | - | 302 | - | 330 |
| $6 / 30 / 2010$ | 31 | - | 303 | - | 333 |
| $6 / 30 / 2009$ | 31 | - | 302 | - | 334 |
| $6 / 30 / 2008$ | 30 | - | 303 | - | 332 |
| $6 / 30 / 2007$ | 30 | - |  | - | 333 |

## Number of Participating Employers (cont.)

## LEOFF Plan 1

| Fiscal Year Ended | Component Units <br> of WA State | Counties/ <br> Municipalities | Other Political <br> Subdivisions | Total |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $6 / 30 / 2016$ | - | 23 | - | 6 | 29 |
| $6 / 30 / 2015$ | - | 27 | - | 6 | 33 |
| $6 / 30 / 2014$ | - | 36 | - | 9 | 45 |
| $6 / 30 / 2013$ | - | 41 | - | 10 | 51 |
| $6 / 30 / 2012$ | - | - | 12 | 54 |  |
| $6 / 30 / 2011$ | - | - | - | 14 | 62 |
| $6 / 30 / 2010$ | - | - | 15 | 16 | 69 |
| $6 / 30 / 2009$ | - | - | 16 | 76 |  |
| $6 / 30 / 2008$ | - | 71 | - | 18 | 87 |
| $6 / 30 / 2007$ | - | 74 | - | 92 |  |


| LEOFF Plan 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended | Component Units of WA State | Counties/ Municipalities | School Districts | Other Political Subdivisions | Total |
| 6/30/2016 | 8 | 204 | - | 164 | 376 |
| 6/30/2015 | 8 | 205 | - | 157 | 370 |
| 6/30/2014 | 8 | 204 | - | 157 | 369 |
| 6/30/2013 | 8 | 212 | - | 154 | 374 |
| 6/30/2012 | 8 | 212 | - | 153 | 373 |
| 6/30/2011 | 8 | 214 | - | 152 | 374 |
| 6/30/2010 | 8 | 215 | - | 149 | 372 |
| 6/30/2009 | 8 | 217 | - | 150 | 375 |
| 6/30/2008 | 7 | 219 | - | 148 | 374 |
| 6/30/2007 | 7 | 219 | - | 153 | 379 |

## Employers Covered by DRS-Administered Retirement Systems

As of June 30, 2016 - Page 1 of 12

| Air Quality Agencies |
| :--- |
| Benton Clean Air Agency |
| NW Clean Air Agency |
| Olympic Region Clean Air |
| Agency |
| Puget Sound Clean Air Agency |
| Spokane Regional Clean Air |
| $\quad$ Agency |
| SW Clean Air Agency |
| Yakima Regional Clean Air |
| Agency |


| Airports, Airport Boards |
| :--- |
| Pangborn Memorial Airport |
| Snohomish Co. Airport |
| Spokane International Airport |
| Walla Walla Regional Airport |

Area Agencies on Aging
Aging \& Long-Term Care of
Eastern WA
Olympic Area Agency on Aging
SE WA Aging \& Long-Term Care
Associations, Unions
Inlandboatmen's Union of the
Pacific
King Co. Directors' Association
Sound Cities Association
WA Federation of State
Employees

| Cemetery Districts |
| :--- |
| Cowlitz Co. Cemetery Dist. |
| $\quad 1,2$ \& 5 |
| Pend Oreille Cemetery Dist. 1 |
| Skagit Co. Cemetery Dist. 2 |


| Charter Schools | Cities and Towns (cont.) |
| :---: | :---: |
| Excel Public Charter School | Chehalis |
| Green Dot Public Schools | Chelan |
| PRIDE Prep Schools | Cheney |
| Rainier Prep | Chewelah |
| SOAR Academy | Clarkston |
| Spokane International Academy | Cle Elum |
| Summit Public Schools | Clyde Hill |
|  | Colfax |
| Cities and Towns | College Place |
|  | Colton (Town of) |
| Aberdeen | Colville |
| Airway Heights | Conconully (Town of) |
| Algona | Concrete (Town of) |
| Anacortes | Connell |
| Arlington | Cosmopolis |
| Asotin | Coulee City (Town of) |
| Auburn | Coulee Dam (Town of) |
| Bainbridge Island | Coupeville (Town of) |
| Battle Ground | Creston (Town of) |
| Beaux Arts Village | Cusick (Town of) |
| Bellevue | Darrington (Town of) |
| Bellingham | Davenport |
| Benton City | Dayton |
| Bingen | Deer Park |
| Black Diamond | Des Moines |
| Blaine | DuPont |
| Bonney Lake | Duvall |
| Bothell | East Wenatchee |
| Bremerton | Eatonville (Town of) |
| Brewster | Edgewood |
| Bridgeport | Edmonds |
| Brier | Electric City |
| Buckley | Ellensburg |
| Burien | Elma |
| Burlington | Elmer City (Town of) |
| Camas | Entiat |
| Carbonado (Town of) | Enumclaw |
| Carnation | Ephrata |
| Cashmere | Everett |
| Castle Rock | Everson |
| Cathlamet (Town of) | Federal Way |
| Centralia | Ferndale |

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 2 of 12

| Cities and Towns (cont.) | Cities and Towns (cont.) | Cities and Towns (cont.) |
| :---: | :---: | :---: |
| Fife | Mabton | Pacific |
| Fircrest | Mansfield (Town of) | Palouse |
| Forks | Maple Valley | Pasco |
| Friday Harbor (Town of) | Marysville | Pateros |
| Garfield (Town of) | Mattawa (City of) | Pe Ell (Town of) |
| George | McCleary | Port Angeles |
| Gig Harbor | Medical Lake | Port Orchard |
| Gold Bar | Medina | Port Townsend |
| Goldendale | Mercer Island | Poulsbo |
| Grand Coulee | Metaline Falls (Town of) | Prosser |
| Grandview | Mill Creek | Pullman |
| Granger (Town of) | Millwood (Town of) | Puyallup |
| Granite Falls | Milton | Quincy |
| Hamilton (Town of) | Monroe | Rainier |
| Harrington (Town of) | Montesano | Raymond |
| Hoquiam | Morton | Reardan (Town of) |
| Hunts Point (Town of) | Moses Lake | Redmond |
| Ilwaco | Mossyrock | Renton |
| Issaquah | Mount Vernon | Republic |
| Kalama | Mountlake Terrace | Richland |
| Kelso | Moxee | Ridgefield |
| Kenmore | Mukilteo | Ritzville |
| Kennewick | Naches (Town of) | Riverside (Town of) |
| Kent | Napavine | Rock Island |
| Kettle Falls | Newcastle | Rosalia (Town of) |
| Kirkland | Newport | Roslyn |
| Kittitas | Nooksack | Roy |
| La Center | Normandy Park | Royal City |
| La Conner (Town of) | North Bend | Ruston (Town of) |
| LaCrosse (Town of) | North Bonneville | Sammamish |
| Lacey | Northport (Town of) | SeaTac |
| Lake Forest Park | Oak Harbor | Seattle |
| Lake Stevens | Oakesdale (Town of) | Sedro-Woolley |
| Lakewood | Oakville | Selah |
| Langley | Ocean Shores | Sequim |
| Leavenworth | Odessa (Town of) | Shelton |
| Liberty Lake | Okanogan | Shoreline |
| Lind (Town of) | Olympia | Skykomish (Town of) |
| Long Beach | Omak | Snohomish |
| Longview | Oroville | Snoqualmie |
| Lynden | Orting | Soap Lake |
| Lynnwood | Othello | South Bend |

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 3 of 12

| Cities and Towns (cont.) | Cities and Towns (cont.) | Councils (cont.) |
| :---: | :---: | :---: |
| South Cle Elum (Town of) | Woodland | Spokane Area Workforce |
| Spangle (Town of) | Woodway (Town of) | Development Council |
| Spokane | Yacolt (Town of) | SW WA Council Government on |
| Spokane Valley | Yakima | Aging and Disability |
| Sprague | Yarrow Point (Town of) | Thurston Regional Planning |
| Springdale (Town of) | Yelm | Council |
| Stanwood | Zillah | Whatcom Council of |
| Steilacoom (Town of) |  | Governments |
| Stevenson | Conservation Districts |  |
| Sultan |  | Counties |
| Sumas | Cascadia |  |
| Sumner | Clallam | Adams |
| Sunnyside | Columbia | Asotin |
| Tacoma | Cowlitz | Benton |
| Tekoa | Grays Harbor | Chelan |
| Tenino | King | Clallam |
| Tieton | Kittitas | Clark |
| Toledo | Okanogan | Columbia |
| Tonasket | Pacific | Cowlitz |
| Toppenish | Snohomish | Douglas |
| Tukwila | Spokane Co. | Ferry |
| Tumwater | Stevens Co. | Franklin |
| Twisp (Town of) | Thurston | Garfield |
| Union Gap | Wahkiakum | Grant |
| Uniontown (Town of) |  | Grays Harbor |
| University Place | Councils | Island |
| Vancouver | Councils | Jefferson |
| Waitsburg | Columbia River Council of | King |
| Walla Walla | Governments | Kitsap |
| Wapato | Cowlitz-Wahkiakum Council of | Kittitas |
| Warden | Governments | Klickitat |
| Washougal | Grays Harbor Council of | Lewis |
| Washtucna (Town of) | Governments | Lincoln |
| Waterville (Town of) | Lewis, Mason, Thurston Council of | Mason |
| Wenatchee | Governments | Okanogan |
| West Richland | Northwest Regional Council | Pacific |
| Westport | Pacific Mountain Workforce | Pend Oreille |
| White Salmon | Development Council | Pierce |
| Wilbur (Town of) | Puget Sound Regional Council | San Juan |
| Winlock | Skagit Council of Governments | Skagit |
| Winthrop (Town of) | South Central Workforce | Skamania |
| Woodinville | Council | Snohomish |

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 4 of 12

| Counties (cont.) |
| :--- |
| Spokane |
| Stevens |
| Thurston |
| Wahkiakum |
| Walla Walla |
| Whatcom |
| Whitman |
| Yakima |
|  |
| Development |
| Authorities/Districts |
| Cultural Development Auth. of |
| $\quad$ King Co. |
| North Bonneville Public |
| Development Auth. |
| Seattle Southside Regional |
| $\quad$ Tourism Auth. |
| Tricounty Economic Development |
| Dist. |
| Walla Walla Valley Metro |
| Planning Org. |

## Educational Service <br> Districts

ESD 105
ESD 112
ESD 113
ESD 123
North Central WA ESD 171
Northeast WA ESD 101
Northwest Regional ESD 189
Olympic ESD 114
Puget Sound ESD 121

## Emergency Services and Communications Districts

Franklin Co. Emergency Management<br>Grays Harbor Communications

```
Emergency Services and
Communications Districts
(cont.)
```

Island Co. Emergency Services
Communication Ctr.
Jefferson Co. 911
Communications
KITTCOM
Mason Co. Emergency
Communications
Multi Agency Communications
Center
NORCOM 911
North Country Emergency
Medical Service
RIVERCOM
San Juan Island Emergency
Medical Service
Skagit 911 (SECOM)
SNOCOM 911
Snohomish Co. Emergency Radio System
South Beach Ambulance Service
South Sound 911
Thurston 911 Communications
Valley Communication Center

## Fire Protection Districts

Adams Co. FPD 5
Asotin Co. FPD 1
Bainbridge Island Fire Dept.
Benton Co. FPDs 1, 2, 4 \& 6
Central Kitsap Fire \& Rescue
Central Whidbey Island Fire \&
Rescue
Chelan Co. FPDs 1, 3, 5, 6, 7 \& 9
Clallam Co. FPDs 1, 2, 3 \& 5
Clark Co. Fire \& Rescue
Clark Co. FPDs 3, 5, 6, 10 \& 13
Columbia Co. FPD 3
Cowlitz Co. FPDs 1, 2, 3, 5 \& 6

## Fire Protection Districts (cont.)

Cowlitz-Skamania Co. FPD 7
Douglas Co. FPD 2
Douglas-Okanogan Co. FPD 15
East County Fire \& Rescue
East Pierce Co. Fire \& Rescue
Franklin Co. FPD 3
Garfield Co. FPD 1
Grant Co. FPDs 3, 5, 8 \& 10
Grays Harbor Co. FPDs $2 \& 5$
Island Co. FPD 1
Jefferson Co. FPDs 1, 2, 3 \& 4
Kent Fire Dept. Regional Fire Auth.
King Co. FPDs 2, 10, 16, 20, 27,
$28,34,40,43,44,45 \& 50$
Kitsap Co. FPD 18
Kittitas Co. FPDs $1,2 \& 7$
Klickitat Co. FPDs 3 \& 7
Lake Stevens Fire
Lewis Co. FPDs 2, 3, 5, 6, 10, 14 \& 15
Mason Co. FPDs 3, 4, 5, 6, 11, 13 \& 16
North County Regional Fire Auth.
North Highline Fire Dist.
North Kitsap Fire \& Rescue
North Mason Regional Fire Auth.
North Whidbey Fire \& Rescue
Okanogan Co. FPD 6
Pacific Co. FPD 1
Pend Oreille FPDs 2 \& 4
Pierce Co. FPDs 3, 5, 6, 10, 13, $14,16,17,18,21,23 \& 27$
Riverside Fire Auth.
San Juan Co. FPDs 2, 3 \& 4
Shoreline Fire Dept.
Skagit Co. FPDs 6, 8 \& 13
Snohomish Co. FPDs 1, 3, 4, 5, 7, 12, 15, 17, 19, 21, 22, 26 \& 28
Snoqualmie Pass Fire \& Rescue

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 5 of 12

## Fire Protection Districts (cont.)

Southeast Thurston Fire Auth.
South King Fire \& Rescue South Kitsap Fire \& Rescue
South Pend Oreille Fire \& Rescue
South Whatcom Fire Auth.
South Whidbey Fire \& EMS
Spokane Co. FPDs 3, 4, 8, 9, $10 \& 13$
Spokane Valley Fire Dept.
Stevens Co. FPD 1
Thurston Co. FPDs 3, 5, 6, 8, 9, 12,13 \& 17
Valley Regional Fire Auth.
Vashon Island Fire \& Rescue
Walla Walla Co. FPDs 4 \& 5
West Benton Regional Fire Auth.
West Thurston Regional Fire Auth.
Whatcom Co. FPDs 1, 7, 8, 11,
14, 17 \& 21
Woodinville Fire \& Rescue
Yakima Co. FPDs 4, 5, 6 \& 12

## Housing Authorities

Anacortes
Asotin Co.
Bellingham
Bremerton
Chelan Co./Wenatchee
Everett
Grant Co.
Grays Harbor Co.
Island Co.
Joint Republic Ferry Co.
Kelso
Kennewick
King Co.
Kitsap Co. Consolidated
Kittitas Co.
Longview
Okanogan Co.

| Housing Authorities (cont.) |  |  |
| :--- | :--- | :--- |
| Othello |  | Irrigation, Sewer and |
| Water Districts (cont.) |  |  |

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 6 of 12

| Irrigation, Sewer and Water Districts (cont.) | Irrigation, Sewer and Water Districts (cont.) |
| :---: | :---: |
| Lopez Solid Waste Disposal Dist. | Spokane Co. Water Dist. 3 |
| LOTT Clean Water Alliance | Stemilt Irrigation Dist. Stevens |
| Malaga Water Dist. | Pass Sewer Dist. |
| Manchester Water Dist. | Sunland Water Dist. |
| Midway Sewer Dist. | Sunnyside Valley Irrigation Dist. |
| Moab Irrigation Dist. 20 | SW Suburban Sewer Dist. |
| Model Irrigation Dist. 18 | Terrace Heights Sewer Dist. |
| Moses Lake Irrigation \& Rehabilitation Dist. | Three Rivers Regional Wastewater Auth. |
| Mukilteo Water \& Wastewater | Trentwood Irrigation Dist. 3 |
| Dist. | Valley View Sewer Dist. |
| Naches-Selah Irrigation Dist. | Valley Water Dist. |
| NE Sammamish Sewer \& Water | Vera Water \& Power |
| Dist. | Walla Walla Watershed |
| North City Water Dist. | Management |
| North Beach Water Dist. | Wenatchee Reclamation Dist. |
| North Perry Ave. Water Dist. | Whatcom Co. Water Dist. 2 \& 7 |
| North Spokane Irrigation Dist. 8 | Whitestone Reclamation Dist. |
| Northshore Utility Dist. | Whitworth Water Dist. 2 |
| Okanogan Irrigation Dist. | Willapa Valley Water Dist. |
| Olympic View Water Dist. | Woodinville Water Dist. |
| Orchard Ave. Irrigation Dist. Oroville-Tonasket Irrigation Dist. | Yakima-Tieton Irrigation Dist. |
| Pasadena Park Irrigation Dist. 17 Point Roberts Water Dist. 4 | Libraries, Library Districts |
| Quincy-Columbia Basin Irrigation Dist. | Central Skagit Rural Library Dist. Columbia Co. Rural Library Dist. |
| Ronald Wastewater Dist. | Fort Vancouver Regional Library |
| Roza Irrigation Dist. | Jefferson Co. Rural Library Dist. |
| Samish Water Dist. | King Co. Law Library |
| Sammamish Plateau Water \& | King Co. Rural Library Dist. |
| Sewer Dist. | Kitsap Regional Library |
| Seaview Sewer Dist. | La Conner Regional Library |
| Selah-Moxee Irrigation Dist. | Lopez Island Library Dist. |
| Silver Lake Water Dist. | Mid-Columbia Regional Library |
| Silverdale Water Dist. 16 | North Central Regional Library |
| Skyway Water \& Sewer Dist. | North Olympic Library System |
| Snoqualmie Pass Utility Dist. | Orcas Island Library Dist. |
| Soos Creek Water \& Sewer Dist. | Pend Oreille Library |
| South Columbia Basin Irrigation | Pierce Co. Law Library |
| Dist. | Pierce Co. Rural Library Dist. |

Irrigation, Sewer and Water Districts (cont.)

Spokane Co. Water Dist. 3
Stemilt Irrigation Dist. Stevens
Pass Sewer Dist.
Sunland Water Dist.
Sunnyside Valley Irrigation Dist.
SW Suburban Sewer Dist.
Terrace Heights Sewer Dist.
Three Rivers Regional Wastewater
Auth.
Trentwood Irrigation Dist. 3
Valley View Sewer Dist.
Valley Water Dist.
Vera Water \& Power
Walla Walla Watershed
Management
Wenatchee Reclamation Dist.
Whatcom Co. Water Dist. 2 \& 7
Whitestone Reclamation Dist.
Whitworth Water Dist. 2
Willapa Valley Water Dist.
Woodinville Water Dist.
Yakima-Tieton Irrigation Dist.

## Libraries, Library Districts

Central Skagit Rural Library Dist. Columbia Co. Rural Library Dist. Fort Vancouver Regional Library Jefferson Co. Rural Library Dist. King Co. Law Library King Co. Rural Library Dist. Kitsap Regional Library La Conner Regional Library Lopez Island Library Dist. Mid-Columbia Regional Library North Central Regional Library North Olympic Library System Orcas Island Library Dist. Pend Oreille Library Pierce Co. Law Library Pierce Co. Rural Library Dist.

## Libraries, Library Districts

 (cont.)San Juan Island Co. Library Sno-Isle Regional Library Spokane Co. Law Library
Spokane Co. Library Dist.
Stevens Co. Rural Library
Timberland Regional Library
Upper Skagit Library Dist.
Walla Walla Co. Rural Library Dist.
Whatcom Co. Public Library
Whitman Co. Rural Library
Yakima Valley Regional Library

## Mosquito Districts

Adams Co. Mosquito Dist.
Benton Co. Mosquito Control Dist.
Columbia Mosquito Control Dist.
Franklin Co. Mosquito Control
Dist.
Yakima Co. Mosquito Control

## Parks and Recreation Districts

Bainbridge Island Merro Parks \& Recreation Dist.
Eastmont Metropolitan Parks Dist. Fidalgo Pool \& Fitness Center
Key Peninsula Metro Park Dist.
Manson Parks \& Recreation Dist.
Metropolitan Park Dist. of Tacoma
Peninsula Metropolitan Park Dist.
San Juan Island Park \& Recreational Dist.
Si View Metropolitan Park Dist.
South Whidbey Parks \& Recreation Dist.

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 7 of 12

| Ports | Ports (cont.) |
| :---: | :---: |
| Allyn | Walla Walla |
| Anacortes | Wahkiakum Co. 1 |
| Bellingham | Whitman Co. |
| Benton | Willapa Harbor |
| Bremerton | Woodland |
| Brownsville |  |
| Camas-Washougal | Public Facility Districts |
| Centralia |  |
| Chehalis | Asotin Co. Public Facilities Dist. |
| Chelan Co. | Edmonds Public Facilities Dist. |
| Clarkston | Lynnwood Public Facilities Dist. |
| Columbia | Spokane Public Facility Dist. |
| Douglas Co. |  |
| Edmonds |  |
| Everett | Public Health |
| Friday Harbor | Asotin Co. Health Dist. |
| Grant Co. 1 \& 9 | Benton-Franklin Health Dist. |
| Grays Harbor | Chelan-Douglas Health Dist. |
| Ilwaco | Garfield Co. Health Dist. |
| Kalama | Grant Co. Health Dist. |
| Kennewick | Great Rivers Behavioral Health |
| Kingston | Organization |
| Klickitat | Greater Columbia Behavioral |
| Longview | Health |
| Mattawa | Kittitas Co. Public Hospital Dist. 2 |
| Moses Lake | Kitsap Public Health Dist. |
| Olympia | NE Tricounty Health Dist. |
| Orcas | North Sound Regional Support |
| Othello | Network |
| Pasco | Snohomish Health Dist. |
| Peninsula | Spokane Regional Health Dist. |
| Port Angeles | SW Washington Behavioral |
| Port Townsend | Health Regional Support |
| Ridgefield | Network |
| Royal Slope | Yakima Co. Health Dist. |
| Seattle |  |
| Shelton |  |
| Skagit Co. |  |
| Skamania Co. |  |
| Sunnyside |  |
| Tacoma |  |
| Vancouver |  |

## Public Utility Districts

Asotin Co. PUD 1
Benton Co. PUD 1
Chelan Co. PUD 1
Clallam Co. PUD 1
Clark Co. PUD
Columbia Basin Hydropower
Cowlitz Co. PUD 1
Douglas Co. PUD 1
Energy Northwest
Ferry Co. PUD 1
Franklin Co. Public Works 1
Franklin Co. PUD 1
Grant Co. Public Works
Grant Co. PUD 2
Grays Harbor Co. PUD 1
Jefferson Co. PUD 1
Kitsap Co. PUD 1
Kittitas Co. PUD 1
Klickitat Co. PUD 1
Lewis Co. PUD 1
Mason Co. PUD 1 \& 3
Okanogan Co. PUD 1
Pacific Co. PUD 2
Pend Oreille Co. PUD 1
Skagit Co. PUD 1
Skamania Co. PUD 1
Snohomish Co. PUD 1
Stevens Co. PUD
Thurston Co. PUD 1
Wahkiakum Co. PUD 1
West Sound Utility Dist.

## Road Departments

Chelan Co. Roads
Lincoln Co. Highway Dept.

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 8 of 12

| School Districts | School Districts (cont.) | School Districts (cont.) |
| :---: | :---: | :---: |
| Aberdeen | Columbia (Walla Walla Co.) | Goldendale |
| Adna | Colville | Grand Coulee Dam |
| Almira | Concrete | Grandview |
| Anacortes | Conway | Granger |
| Arlington | Cosmopolis | Granite Falls |
| Asotin Anatone | Coulee Hartline | Grapeview |
| Auburn | Coupeville | Great Northern |
| Bainbridge Island | Crescent | Green Mountain |
| Battle Ground | Creston | Griffin |
| Bellevue | Curlew | Harrington |
| Bellingham | Cusick | Highland |
| Benge | Damman | Highline |
| Bethel | Darrington | Hockinson |
| Bickleton | Davenport | Hood Canal |
| Blaine | Dayton | Hoquiam |
| Boistfort | Deer Park | Inchelium |
| Bremerton | Dieringer | Index |
| Brewster | Dixie | Issaquah |
| Bridgeport | East Valley (Spokane Co.) | Kahlotus |
| Brinnon | East Valley (Yakima Co.) | Kalama |
| Burlington-Edison | Eastmont | Keller |
| Camas | Easton | Kelso |
| Cape Flattery | Eatonville | Kennewick |
| Carbonado Historical | Edmonds | Kent |
| Cascade | Ellensburg | Kettle Falls |
| Cashmere | Elma | Kiona-Benton City |
| Castle Rock | Endicott | Kittitas |
| Centerville | Entiat | Klickitat |
| Central Kitsap | Enumclaw | La Center |
| Central Valley | Ephrata | La Conner |
| Centralia | Evaline | LaCrosse |
| Chehalis | Everett | Lake Chelan |
| Cheney | Evergreen (Clark Co.) | Lake Stevens |
| Chewelah | Evergreen (Stevens Co.) | Lake Washington |
| Chimacum | Federal Way | Lakewood |
| Clarkston | Ferndale | Lamont |
| Cle Elum-Roslyn | Fife | Liberty |
| Clover Park | Finley | Lind |
| Colfax | Franklin Pierce | Longview |
| College Place | Freeman | Loon Lake |
| Colton | Garfield | Lopez |
| Columbia (Stevens Co.) | Glenwood | Lyle |

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 9 of 12

| School Districts (cont.) | School Districts (cont.) | School Districts (cont.) |
| :---: | :---: | :---: |
| Lynden | Ocosta | Riverside |
| Mabton | Odessa | Riverview |
| Mansfield | Okanogan | Rochester |
| Manson | Olympia | Roosevelt |
| Mary M. Knight | Omak | Rosalia |
| Mary Walker | Onalaska | Royal |
| Marysville | Onion Creek | Saint John |
| McCleary | Orcas Island | San Juan Island |
| Mead | Orchard Prairie | Satsop |
| Medical Lake | Orient | Seattle |
| Mercer Island | Orondo | Sedro-Woolley |
| Meridian | Oroville | Selah |
| Methow Valley | Orting | Selkirk |
| Mill A | Othello | Sequim |
| Monroe | Palisades | Shaw Island |
| Montesano | Palouse | Shelton |
| Morton | Pasco | Shoreline |
| Moses Lake | Pateros | Skamania |
| Mossyrock | Paterson | Skykomish |
| Mount Adams | Pe Ell | Snohomish |
| Mount Baker | Peninsula | Snoqualmie Valley |
| Mount Pleasant | Pioneer | Soap Lake |
| Mount Vernon | Pomeroy | South Bend |
| Mukilteo | Port Angeles | South Kitsap |
| Naches Valley | Port Townsend | South Whidbey |
| Napavine | Prescott | Southside |
| Naselle-Grays River Valley | Prosser | Spokane Public Schools |
| Nespelem | Pullman | Sprague |
| Newport | Puyallup | Stanwood-Camano |
| Nine Mile Falls | Queets-Clearwater | Star |
| Nooksack Valley | Quilcene | Starbuck |
| North Beach | Quillayute | Stehekin |
| North Franklin | Quinault Lake | Steilacoom Historical |
| North Kitsap | Quincy | Steptoe |
| North River | Rainier | Stevenson-Carson |
| North Thurston | Raymond | Sultan |
| Northport | Reardan-Edwall | Summit |
| Northshore | Renton | Sumner |
| Oak Harbor | Republic | Sunnyside |
| Oakesdale | Richland | Tacoma |
| Oakville | Ridgefield | Taholah |
| Ocean Beach | Ritzville | Tahoma |

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 10 of 12

| School Districts (cont.) |
| :--- |
| Tenino |
| Thorp |
| Toledo |
| Tonasket |
| Toppenish |
| Touchet |
| Toutle Lake |
| Trout Lake |
| Tukwila |
| Tumwater |
| Union Gap |
| University Place |
| Valley |
| Vancouver |
| Vashon Island |
| Wahkiakum |
| Wahluke |
| Waitsburg |
| Walla Walla |
| Wapato |
| Warden Jr. Consolidated |
| Washougal |
| Washtucna |
| Waterville |
| Wellpinit |
| Wenatchee |
| West Valley (Spokane Co.) |
| West Valley (Yakima Co.) |
| White Pass |
| White River |
| White Salmon |
| Wilbur |
| Willapa Valley |
| Wilson Creek |
| Winlock |
| Wishkah Valley |
| Wishram |
| Woodland |
| Yakima |
| Yelm |
| Zillah |

## Transportation Authorities, Transportation Districts

Asotin Co.
Ben Franklin Transit
Chelan-Douglas P.T.B.A.
Chelan-Douglas Transportation
Council
Clallam Transit System
Clark Co. P.T.B.A.
Columbia Co. Public
Transportation
Grant Transit Auth.
Grays Harbor Transportation
Auth.

Intercity Transit
Island Transit
Jefferson Transit Auth.
Kitsap Transit
Lewis P.T.B.A.
Mason Co. P.T.B.A.
Okanogan Co. Transit Auth.
Pacific Transit System
Pierce Co. P.T.B.A.
Snohomish Co. P.T.B.A.
Spokane Regional Transportation Council
Spokane Transit Auth.
SW WA Regional Transportation
Council
Valley Transit
Whatcom Transportation Auth.

## Weed Control Districts

Benton Co. Noxious Weed
Control Board
Grant Co. Noxious Weed Board
Grant Co. Weed Dist. 1 \& 3
Pierce Co. Noxious Weed Board
Spokane Co. Noxious Weed
Control Board

## Other

## Other Government Entities

Lower Columbia Fish Recovery Board
Public Stadium Auth.
Snohomish Co. Police Staff
Auxiliary
South Correctional Entity
Tacoma-Pierce Co. Employment \&
Training Consortium
WA School Information
Processing Cooperative
Yakima Valley Conference of Governments

## State Entities

## State Agencies

Administrative Office of the Courts
Archaeology-Historic Preservation
Board for Volunteer Firefighters
Board of Industrial Insurance Appeals
Board of Tax Appeals
Child Study \& Treatment Center
Civil Legal Aid Office of
Consolidated Support Services
Consolidated Technology Services
County Road Administration Board
Court of Appeals
Dept. of Agriculture
Dept. of Commerce
Dept. of Corrections
Dept. of Early Learning
Dept. of Ecology
Dept. of Employment Security
Dept. of Enterprise Services
Dept. of Financial Institutions
Dept. of Fish \& Wildlife
Dept. of Health

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 11 of 12

State Agencies (cont.)
Dept. of Labor \& Industries
Dept. of Licensing
Dept. of Natural Resources
Dept. of Retirement Systems
Dept. of Revenue
Dept. of Services for the Blind
Dept. of Social \& Health
Services (8)
Dept. of Transportation
Dept. of Veterans Affairs
Eastern State Hospital
Eastern WA State Historical Society
Echo Glen Children's Center
Economic Development Finance Auth.
Environmental \& Land Use Hearings Office
Fircrest School
Green Hill School
Health Care Facilities Auth.
House of Representatives
Indian Advisory Council
Innovate Washington
Joint Legislative Audit \& Review Committee
Joint Legislative Systems Committee
Joint Transportation Committee
Lakeland Village
Law Library
LEAP Committee
LEOFF Plan 2 Retirement Board
Liquor \& Cannabis Board
Military Dept.
Naselle Youth Camp
Office of Administrative Hearings
Office of Financial Management
Office of Minority \& Women's
Business Enterprises
Office of Public Defense
Office of the Attorney General

State Agencies (cont.)
Office of Forecast Council
Office of the Governor
Office of the Insurance
Commissioner
Office of Legislative Support
Services
Office of the Lieutenant Governor
Office of the Secretary of State
Office of the State Actuary
Office of the State Auditor
Office of the State Treasurer
Puget Sound Partnership
Rainier School
Recreation \& Conservation Office
Senate
Special Commitment Center
State Board for Community \& Technical Colleges
State Board of Accountancy
Statute Law Committee
Student Achievement Council
Superintendent of Public Instruction
Supreme Court
Transportation Improvement Board
Veterans Home - Spokane
WA Pollution Liability Insurance Agency
WA Soldiers Home \& Colony
WA State Bar Association
WA State Caseload Forecast Council
WA State Ferries
WA State Health Care Auth.
WA State Historical Society
WA State Investment Board
WA State Patrol
WA State School Directors' Association
WA State School for the Blind

## State Agencies (cont.)

WA State School for the Deaf
WA Veterans Home
Western State Hospital
Workforce Training \& Education
Coordinating Board
Yakima Valley School

## State Commissions

African-American Affairs
Apple
Arts
Asian Pacific American Affairs
Beef
Charter School
Columbia River Gorge
Conservation
Criminal Justice Training
Dairy Products
Fruit
Gambling
Grain
Hispanic Affairs
Hop
Horse Racing
Housing Finance
Human Rights
Judicial Conduct
Lottery
Parks \& Recreation
Potato
Public Disclosure
Public Employment Relations
Puget Sound Pilotage
Salaries for Elected Officials
Traffic Safety
Tree Fruit Research
Utilities \& Transportation
Wine

## Employers Covered by DRS-Administered Retirement Systems (cont.)

As of June 30, 2016 - Page 12 of 12

Technical Colleges, Community Colleges<br>Bates Technical College<br>Bellevue Community College<br>Bellingham Technical College<br>Big Bend Community College<br>Cascadia College<br>Centralia College<br>Clark Community College<br>Clover Park Technical College<br>Columbia Basin Community College<br>Edmonds Community College<br>Everett Community College<br>Grays Harbor College<br>Green River College<br>Highline Community College<br>Lake Washington Institute of Technology<br>Lower Columbia Community College<br>Olympic College<br>Peninsula College<br>Pierce College<br>Renton Technical College<br>Seattle Community College<br>Shoreline Community College<br>Skagit Valley College<br>South Puget Sound Community College<br>Spokane Community College<br>Tacoma Community College<br>Walla Walla Community College<br>Wenatchee Valley College<br>Whatcom Community College<br>Yakima Valley College

## Universities

Central Washington University
Eastern Washington University
Evergreen State College
University of Washington
Washington State University
Western Washington University

## Schedule of Benefit Recipients by Type of Benefit

## PERS Plan 1

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | 3 $50 \%$ | $\begin{array}{r} 4 \\ 66 \% \end{array}$ |
| \$ 0-500 ${ }^{2}$ | 3,758 | 2,809 | 5 | 203 | 741 | 2,490 | 843 | 387 | 38 |
| 501-1,000 | 8,110 | 5,734 | 3 | 368 | 2,005 | 5,040 | 1,660 | 1,271 | 139 |
| 1,001-1,500 | 8,020 | 6,255 | 2 | 245 | 1,518 | 4,888 | 1,816 | 1,123 | 193 |
| 1,501-2,000 | 9,455 | 8,620 | - | 130 | 705 | 6,624 | 1,560 | 998 | 273 |
| 2,001-2,500 | 7,057 | 6,673 | - | 26 | 358 | 4,717 | 1,155 | 858 | 327 |
| 2,501-3,000 | 5,122 | 4,928 | - | 12 | 182 | 3,371 | 798 | 667 | 286 |
| 3,001-3,500 | 3,343 | 3,252 | - | 4 | 87 | 2,236 | 433 | 422 | 252 |
| 3,501-4,000 | 2,145 | 2,104 | - | - | 41 | 1,373 | 344 | 269 | 159 |
| Over 4,000 | 3,260 | 3,208 | - | 1 | 51 | 1,904 | 487 | 501 | 368 |
| Totals | 50,270 | 43,583 | 10 | 989 | 5,688 | 32,643 | 9,096 | 6,496 | 2,035 |

${ }^{1} \mathbf{1}$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ or $\mathbf{4}$ (66\%): Beneficiary receives two-thirds the monthly benefit for life
${ }^{2}$ Includes L\&I holdoffs

## PERS Plan 2

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | $\begin{array}{r} 4 \\ 66 \% \end{array}$ |
| \$ 0-500 | 8,013 | 5,945 | - | 1,107 | 961 | 5,380 | 1,999 | 455 | 179 |
| 501-1,000 | 9,193 | 7,717 | - | 580 | 896 | 5,921 | 2,219 | 706 | 347 |
| 1,001-1,500 | 7,440 | 6,887 | - | 169 | 384 | 4,875 | 1,489 | 740 | 336 |
| 1,501-2,000 | 4,974 | 4,777 | - | 30 | 167 | 3,344 | 777 | 587 | 266 |
| 2,001-2,500 | 3,169 | 3,096 | - | 9 | 64 | 2,011 | 463 | 474 | 221 |
| 2,501-3,000 | 2,125 | 2,087 | - | 3 | 35 | 1,375 | 283 | 322 | 145 |
| 3,001-3,500 | 1,365 | 1,342 | - | 1 | 22 | 844 | 171 | 231 | 119 |
| 3,501-4,000 | 814 | 806 | - | 1 | 7 | 538 | 86 | 125 | 65 |
| Over 4,000 | 1,600 | 1,590 | - | 2 | 8 | 1,001 | 158 | 276 | 165 |
| Totals | 38,693 | 34,247 | - | 1,902 | 2,544 | 25,289 | 7,645 | 3,916 | 1,843 |

${ }^{1} \mathbf{1}$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ or $\mathbf{4}$ (66\%): Beneficiary receives two-thirds the monthly benefit for life

## Schedule of Benefit Recipients by Type of Benefit (cont.)

## PERS Plan 3

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | $\begin{array}{r} 4 \\ 66 \% \end{array}$ |
| \$ 0-500 | 1,258 | 1,041 | - | 78 | 139 | 796 | 345 | 76 | 41 |
| 501-1,000 | 986 | 937 | - | 12 | 37 | 636 | 208 | 94 | 48 |
| 1,001-1,500 | 480 | 473 | - | 1 | 6 | 319 | 77 | 57 | 27 |
| 1,501-2,000 | 274 | 270 | - | 1 | 3 | 178 | 42 | 32 | 22 |
| 2,001-2,500 | 119 | 118 | - | - | 1 | 74 | 18 | 17 | 10 |
| 2,501-3,000 | 49 | 49 | - | - | - | 27 | 7 | 10 | 5 |
| 3,001-3,500 | 14 | 14 | - | - | - | 13 | - | - | 1 |
| 3,501-4,000 | 2 | 2 | - | - | - | 1 | 1 | - | - |
| Over 4,000 | 4 | 4 | - | - | - | 3 | - | 1 | - |
| Totals | 3,186 | 2,908 | - | 92 | 186 | 2,047 | 698 | 287 | 154 |

${ }^{1} \mathbf{1}$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ or $\mathbf{4}$ (66\%): Beneficiary receives two-thirds the monthly benefit for life

## SERS Plan 2

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | 4 $66 \%$ |
| \$ 0-500 | 2,379 | 2,022 | - | 193 | 164 | 1,711 | 498 | 116 | 54 |
| 501-1,000 | 2,312 | 2,166 | - | 54 | 92 | 1,688 | 392 | 158 | 74 |
| 1,001-1,500 | 1,051 | 1,018 | - | 6 | 27 | 751 | 138 | 110 | 52 |
| 1,501-2,000 | 449 | 443 | - | 1 | 5 | 336 | 49 | 48 | 16 |
| 2,001-2,500 | 188 | 187 | - | - | 1 | 121 | 19 | 39 | 9 |
| 2,501-3,000 | 80 | 79 | - | - | 1 | 60 | 7 | 12 | 1 |
| 3,001-3,500 | 42 | 42 | - | - | - | 29 | 7 | 3 | 3 |
| 3,501-4,000 | 28 | 28 | - | - | - | 22 | 3 | 2 | 1 |
| Over 4,000 | 33 | 33 | - | - | - | 24 | 1 | 5 | 3 |
| Totals | 6,562 | 6,018 | - | 254 | 290 | 4,742 | 1,114 | 493 | 213 |

1 (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% )}$ : Beneficiary receives half the monthly benefit for life; or 4 (66\%): Beneficiary receives two-thirds the monthly benefit for life

## Schedule of Benefit Recipients by Type of Benefit (cont.)

## SERS Plan 3

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service |  | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | $\begin{array}{r} 4 \\ 66 \% \end{array}$ |
| \$ 0-500 | 3,922 | 3,674 | - | 79 | 169 | 2,825 | 830 | 179 | 88 |
| 501-1,000 | 1,432 | 1,404 | - | 6 | 22 | 1,052 | 196 | 134 | 50 |
| 1,001-1,500 | 282 | 280 | - | 1 | 1 | 208 | 26 | 35 | 13 |
| 1,501-2,000 | 83 | 83 | - | - | - | 64 | 8 | 7 | 4 |
| 2,001-2,500 | 21 | 21 | - | - | - | 17 | 4 | - | - |
| 2,501-3,000 | 4 | 4 | - | - | - | 2 | 2 | - | - |
| 3,001-3,500 | 5 | 5 | - | - | - | 4 | - | 1 | - |
| 3,501-4,000 | - | - | - | - | - | - | - | - | - |
| Over 4,000 | 1 | 1 | - | - | - | 1 | - | - | - |
| Totals | 5,750 | 5,472 | - | 86 | 192 | 4,173 | 1,066 | 356 | 155 |

${ }^{1} \mathbf{1}$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ or $\mathbf{4}$ (66\%): Beneficiary receives two-thirds the monthly benefit for life

## PSERS Plan 2

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit <br> Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | $\begin{array}{r} 4 \\ 66 \% \end{array}$ |
| \$ 0-500 | 44 | 33 | - | 6 | 5 | 28 | 11 | 1 | 4 |
| 501-1,000 | 33 | 32 | - | - | 1 | 26 | 5 | 2 | - |
| 1,001-1,500 | 3 | 3 | - | - | - | 3 | - | - | - |
| 1,501-2,000 | - | - | - | - | - | - | - | - | - |
| 2,001-2,500 | - | - | - | - | - | - | - | - | - |
| 2,501-3,000 | - | - | - | - | - | - | - | - | - |
| 3,001-3,500 | - | - | - | - | - | - | - | - | - |
| 3,501-4,000 | - | - | - | - | - | - | - | - | - |
| Over 4,000 | - | - | - | - | - | - | - | - | - |
| Totals | 80 | 68 | - | 6 | 6 | 57 | 16 | 3 | 4 |

1 (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% )}$ : Beneficiary receives half the monthly benefit for life; or 4 (66\%): Beneficiary receives two-thirds the monthly benefit for life

## Schedule of Benefit Recipients by Type of Benefit (cont.)

## TRS Plan 1

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor <br> Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | $\begin{array}{r} 4 \\ 66 \% \end{array}$ |
| \$ 0-500 | 1,407 | 1,209 | - | 35 | 163 | 965 | 336 | 89 | 17 |
| 501-1,000 | 2,832 | 1,865 | - | 130 | 837 | 1,533 | 593 | 658 | 48 |
| 1,001-1,500 | 3,863 | 2,887 | - | 123 | 853 | 1,946 | 1,107 | 687 | 123 |
| 1,501-2,000 | 9,457 | 8,725 | - | 186 | 546 | 6,350 | 1,870 | 929 | 308 |
| 2,001-2,500 | 7,456 | 7,158 | - | 58 | 240 | 5,078 | 1,267 | 813 | 298 |
| 2,501-3,000 | 4,458 | 4,330 | - | 21 | 107 | 2,716 | 911 | 556 | 275 |
| 3,001-3,500 | 2,831 | 2,790 | - | 2 | 39 | 1,722 | 572 | 334 | 203 |
| 3,501-4,000 | 1,481 | 1,456 | - | 2 | 23 | 888 | 296 | 191 | 106 |
| Over 4,000 | 1,454 | 1,432 | - | 3 | 19 | 838 | 280 | 203 | 133 |
| Totals | 35,239 | 31,852 | - | 560 | 2,827 | 22,036 | 7,232 | 4,460 | 1,511 |

${ }^{1} \mathbf{1}$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ or $\mathbf{4}$ (66\%): Beneficiary receives two-thirds the monthly benefit for life

## TRS Plan 2

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2 \\ 100 \% \end{array}$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | 4 $66 \%$ |
| \$ 0-500 | 460 | 399 | - | 29 | 32 | 321 | 108 | 23 | 8 |
| 501-1,000 | 737 | 626 | - | 36 | 75 | 470 | 170 | 55 | 42 |
| 1,001-1,500 | 696 | 655 | - | 12 | 29 | 461 | 137 | 59 | 39 |
| 1,501-2,000 | 715 | 687 | - | 5 | 23 | 466 | 136 | 63 | 50 |
| 2,001-2,500 | 680 | 675 | - | 1 | 4 | 454 | 96 | 84 | 46 |
| 2,501-3,000 | 437 | 433 | - | 1 | 3 | 309 | 67 | 44 | 17 |
| 3,001-3,500 | 279 | 273 | - | - | 6 | 191 | 31 | 34 | 23 |
| 3,501-4,000 | 164 | 163 | - | - | 1 | 130 | 7 | 14 | 13 |
| Over 4,000 | 137 | 136 | - | - | 1 | 102 | 14 | 14 | 7 |
| Totals | 4,305 | 4,047 | - | 84 | 174 | 2,904 | 766 | 390 | 245 |

1 (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% )}$ : Beneficiary receives half the monthly benefit for life; or 4 (66\%): Beneficiary receives two-thirds the monthly benefit for life

## Schedule of Benefit Recipients by Type of Benefit (cont.)

## TRS Plan 3

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit <br> Amount | Number of Retirees | Service | Disability <br> Disability | Nonduty Disability | Survivor <br> Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | 2 $100 \%$ | $\begin{array}{r} 3 \\ 50 \% \end{array}$ | $\begin{array}{r} 4 \\ 66 \% \end{array}$ |
| \$ 0-500 | 1,737 | 1,471 | - | 69 | 197 | 1,118 | 494 | 74 | 51 |
| 501-1,000 | 2,170 | 2,066 | - | 10 | 94 | 1,488 | 422 | 170 | 90 |
| 1,001-1,500 | 1,768 | 1,739 | - | 2 | 27 | 1,109 | 354 | 193 | 112 |
| 1,501-2,000 | 1,284 | 1,274 | - | 1 | 9 | 899 | 163 | 148 | 74 |
| 2,001-2,500 | 359 | 357 | - | - | 2 | 276 | 30 | 36 | 17 |
| 2,501-3,000 | 97 | 96 | - | - | 1 | 66 | 12 | 14 | 5 |
| 3,001-3,500 | 23 | 23 | - | - | - | 17 | - | 4 | 2 |
| 3,501-4,000 | 10 | 10 | - | - | - | 9 | 1 | - | - |
| Over 4,000 | 5 | 5 | - | - | - | 3 | 1 | 1 | - |
| Totals | 7,453 | 7,041 | - | 82 | 330 | 4,985 | 1,477 | 640 | 351 |

${ }^{1} \mathbf{1}$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ or $\mathbf{4}$ (66\%): Beneficiary receives two-thirds the monthly benefit for life

## LEOFF Plan 1

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2^{2} \\ 100 \% \end{array}$ | $\begin{array}{r} 3^{2} \\ 50 \% \end{array}$ | $\begin{array}{r} 4^{2} \\ 66 \% \end{array}$ | (Standard) |
| \$ 0-500 | 19 | 15 | - | - | 4 | - | 1 | 1 | - | 17 |
| 501-1,000 | 54 | 40 | - | - | 14 | 1 | 2 | 1 | - | 50 |
| 1,001-1,500 | 52 | 27 | 1 | - | 24 | - | 5 | 3 | - | 44 |
| 1,501-2,000 | 82 | 25 | 14 | 12 | 31 | - | 9 | 5 | 2 | 66 |
| 2,001-2,500 | 327 | 58 | 115 | 58 | 96 | 2 | 60 | 5 | 9 | 251 |
| 2,501-3,000 | 952 | 136 | 422 | 129 | 265 | 11 | 153 | 8 | 9 | 771 |
| 3,001-3,500 | 1,678 | 265 | 846 | 158 | 409 | 6 | 154 | 16 | 24 | 1,478 |
| 3,501-4,000 | 1,552 | 357 | 811 | 53 | 331 | 24 | 53 | 6 | 10 | 1,459 |
| Over 4,000 | 2,791 | 1,634 | 735 | 11 | 411 | 9 | 51 | 13 | 15 | 2,703 |
| Totals | 7,507 | 2,557 | 2,944 | 421 | 1,585 | 53 | 488 | 58 | 69 | 6,839 |

${ }^{1} \mathbf{1}$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ 4 (66\%): Beneficiary receives two-thirds the monthly benefit for life; or $\mathbf{A}$ (Standard): Standard option, 100\% joint and survivor, with additional benefits to eligible children
${ }^{2}$ Joint and survivor options are available for post-retirement marriages.

## Schedule of Benefit Recipients by Type of Benefit (cont.)

## LEOFF Plan 2

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2^{2} \\ 100 \% \end{array}$ | $\begin{array}{r} 3^{2} \\ 50 \% \end{array}$ | $\begin{array}{r} 4^{2} \\ 66 \% \end{array}$ |
| \$ 0-500 | 105 | 64 | 11 | 4 | 26 | 49 | 46 | 9 | 1 |
| 501-1,000 | 212 | 148 | 23 | 3 | 38 | 89 | 101 | 12 | 10 |
| 1,001-1,500 | 246 | 187 | 30 | 7 | 22 | 103 | 102 | 22 | 19 |
| 1,501-2,000 | 264 | 192 | 35 | 8 | 29 | 103 | 115 | 26 | 20 |
| 2,001-2,500 | 302 | 255 | 24 | 6 | 17 | 109 | 129 | 40 | 24 |
| 2,501-3,000 | 342 | 290 | 28 | 2 | 22 | 133 | 132 | 48 | 29 |
| 3,001-3,500 | 424 | 371 | 34 | 10 | 9 | 198 | 139 | 51 | 36 |
| 3,501-4,000 | 377 | 336 | 29 | 2 | 10 | 154 | 119 | 57 | 47 |
| Over 4,000 | 1,438 | 1,328 | 79 | 7 | 24 | 653 | 341 | 229 | 215 |
| Totals | 3,710 | 3,171 | 293 | 49 | 197 | 1,591 | 1,224 | 494 | 401 |

${ }^{1} 1$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% )}$ : Beneficiary receives half the monthly benefit for life; or 4 (66\%): Beneficiary receives two-thirds the monthly benefit for life
${ }^{2}$ Joint and survivor options are available for post-retirement marriages.

## WSPRS Plan 1

For the 12 Months Ended June 30, 2015

| Monthly Benefit Amount | Number of Retirees | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Service | Duty Disability | Nonduty Disability | Survivor <br> Payment | A | B | Life |
| \$ 0-500 | 4 | 4 | - | - | - | 2 | 2 | - |
| 501-1,000 | 13 | 3 | - | - | 10 | 10 | 3 | - |
| 1,001-1,500 | 26 | 9 | - | - | 17 | 22 | 4 | - |
| 1,501-2,000 | 29 | 6 | - | - | 23 | 28 | 1 | - |
| 2,001-2,500 | 34 | 12 | - | - | 22 | 26 | 8 | - |
| 2,501-3,000 | 55 | 26 | - | - | 29 | 37 | 17 | 1 |
| 3,001-3,500 | 131 | 104 | - | - | 27 | 45 | 86 | - |
| 3,501-4,000 | 189 | 176 | - | - | 13 | 81 | 106 | 2 |
| Over 4,000 | 552 | 537 | - | - | 15 | 237 | 305 | 10 |
| Totals | 1,033 | 877 | - | - | 156 | 488 | 532 | 13 |

${ }^{1}$ A: $\mathbf{1 0 0 \%}$ joint and survivor, with initial pension equal to the lesser of $50 \%$ AFC and $100 \%$ member's accrued benefit; B: $100 \%$ joint and survivor, with initial pension being the actuarial equivalent of the single-life annuity - this option is available for post-retirement marriages; or Life: Single-life annuity, joint annuitant removed post-retirement

Schedule of Benefit Recipients by Type of Benefit (cont.)

## JRS

For the 12 Months Ended June 30, 2015

|  |  | Retirement Type |  |  |  | Option Selected ${ }^{1}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Amount | Number of Retirees | Service | Duty Disability | Nonduty Disability | Survivor <br> Payment | $\begin{array}{r} 1 \\ \text { Life } \end{array}$ | $\begin{array}{r} 2^{2} \\ 100 \% \end{array}$ | $\begin{array}{r} 3^{2} \\ 50 \% \end{array}$ | $\begin{array}{r} 4^{2} \\ 66 \% \end{array}$ | A <br> (Standard) |
| \$ 0-500 | - | - | - | - | - | - | - | - | - | - |
| 501-1,000 | - | - | - | - | - | - | - | - | - | - |
| 1,001-1,500 | - | - | - | - | - | - | - | - | - | - |
| 1,501-2,000 | - | - | - | - | - | - | - | - | - | - |
| 2,001-2,500 | 1 | - | - | - | 1 | - | - | - | - | 1 |
| 2,501-3,000 | 1 | - | - | - | 1 | - | - | - | - | 1 |
| 3,001-3,500 | 2 | - | - | - | 2 | - | - | - | - | 2 |
| 3,501-4,000 | 7 | - | - | - | 7 | - | - | - | - | 7 |
| Over 4,000 | 95 | 67 | - | - | 28 | - | 6 | - | 1 | 88 |
| Totals | 106 | 67 | - | - | 39 | - | 6 | - | 1 | 99 |

${ }^{1} 1$ (Life): Retiree's lifetime; $\mathbf{2}$ (100\%): Beneficiary receives same monthly benefit for life; $\mathbf{3} \mathbf{( 5 0 \% ) : ~ B e n e f i c i a r y ~ r e c e i v e s ~ h a l f ~ t h e ~ m o n t h l y ~ b e n e f i t ~ f o r ~ l i f e ; ~}$ 4 (66\%): Beneficiary receives two-thirds the monthly benefit for life; or $\mathbf{A}$ (Standard): Standard option, $50 \%$ joint and survivor, for eligible spouses
${ }^{2}$ Joint and survivor options are available for post-retirement marriages.
Source: Office of the State Actuary

Schedule of Average Benefit Payments to Service Retirees

## PERS Plan 1

| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |  |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 479.68 | \$ | 1,087.93 | \$ | 1,596.68 | \$ | 2,134.72 | \$ | 2,739.83 | \$ | 3,555.06 |
| Average Final Salary (Monthly) | \$ | 3,853.94 | \$ | 4,104.79 | \$ | 4,283.15 | \$ | 4,644.25 | \$ | 4,975.68 | \$ | 5,707.66 |
| Number of Active Retirees |  | 175 |  | 121 |  | 137 |  | 156 |  | 143 |  | 343 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 528.85 | \$ | 1,112.60 | \$ | 1,690.84 | \$ | 2,097.07 | \$ | 2,838.69 | \$ | 3,414.25 |
| Average Final Salary (Monthly) | \$ | 4,065.76 | \$ | 3,942.11 | \$ | 4,645.48 | \$ | 4,592.51 | \$ | 5,163.22 | \$ | 5,511.91 |
| Number of Active Retirees |  | 163 |  | 98 |  | 127 |  | 173 |  | 165 |  | 377 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 517.46 | \$ | 1,039.77 | \$ | 1,830.73 | \$ | 2,210.82 | \$ | 2,944.52 | \$ | 3,496.40 |
| Average Final Salary (Monthly) | \$ | 4,096.87 | \$ | 4,051.23 | \$ | 4,622.29 | \$ | 4,716.57 | \$ | 5,296.58 | \$ | 5,653.00 |
| Number of Active Retirees |  | 188 |  | 113 |  | 139 |  | 169 |  | 180 |  | 420 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 542.78 | \$ | 1,027.23 | \$ | 1,523.69 | \$ | 2,158.86 | \$ | 3,070.71 | \$ | 3,387.70 |
| Average Final Salary (Monthly) | \$ | 4,003.50 | \$ | 3,927.11 | \$ | 4,023.64 | \$ | 4,625.35 | \$ | 5,559.31 | \$ | 5,635.18 |
| Number of Active Retirees |  | 160 |  | 145 |  | 125 |  | 187 |  | 198 |  | 474 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 437.37 | \$ | 1,018.91 | \$ | 1,636.44 | \$ | 2,316.51 | \$ | 3,120.62 | \$ | 3,438.97 |
| Average Final Salary (Monthly) | \$ | 3,781.19 | \$ | 3,960.69 | \$ | 4,554.22 | \$ | 5,012.80 | \$ | 5,735.43 | \$ | 5,673.74 |
| Number of Active Retirees |  | 162 |  | 111 |  | 143 |  | 188 |  | 261 |  | 585 |

## Period 7/1/2009 to 6/30/2010

|  | $\$$ | 456.42 | $\$$ | $1,100.41$ | $\$$ | $1,426.42$ | $\$$ | $2,003.96$ | $\$$ | $2,931.01$ | $\$$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average Monthly Benefit | $\$, 388.27$ |  |  |  |  |  |  |  |  |  |  |
| Average Final Salary (Monthly) | $\$$ | $3,755.10$ | $\$$ | $4,211.26$ | $\$$ | $4,053.07$ | $\$$ | $4,439.81$ | $\$$ | $5,328.15$ | $\$$ |
| Number of Active Retirees |  | 158 |  | 126 |  | 169 |  | 215 |  | 228 |  |


| Period 7/1/2008 to $\mathbf{6 / 3 0 / 2 0 0 9}$ |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average Monthly Benefit | $\$$ | 496.59 | $\$$ | 943.47 | $\$$ | $1,430.86$ | $\$$ | $2,171.94$ | $\$$ | $2,965.90$ |
| Average Final Salary (Monthly) | $\$$ | $3,983.17$ | $\$$ | $3,711.90$ | $\$$ | $4,081.31$ | $\$$ | $4,766.33$ | $\$$ | $5,372.21$ |
| Number of Active Retirees |  | 143 |  | 122 |  | 160 | 5 | $5,660.85$ |  |  |

Period 7/1/2007 to 6/30/2008

| Average Monthly Benefit | \$ | 429.94 | \$ | 909.29 | \$ | 1,433.77 | \$ | 1,964.39 | \$ | 2,841.80 | \$ | 3,106.71 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Final Salary (Monthly) | \$ | 3,765.12 | \$ | 3,592.11 | \$ | 4,037.55 | \$ | 4,346.86 | \$ | 5,062.40 | \$ | 5,346.47 |
| Number of Active Retirees |  | 153 |  | 123 |  | 169 |  | 200 |  | 459 |  | 653 |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 440.05 | \$ | 826.24 | \$ | 1,377.09 | \$ | 2,026.97 | \$ | 2,968.26 | \$ | 3,044.75 |
| Average Final Salary (Monthly) | \$ | 3,734.14 | \$ | 3,282.95 | \$ | 3,951.49 | \$ | 4,478.61 | \$ | 5,257.35 | \$ | 5,270.50 |
| Number of Active Retirees |  | 73 |  | 78 |  | 105 |  | 122 |  | 456 |  | 420 |


| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average Monthly Benefit | $\$$ | 393.64 | $\$$ | 855.83 | $\$$ | $1,297.98$ | $\$$ | $1,792.25$ | $\$$ | $2,753.99$ | $\$$ |
| Average Final Salary (Monthly) | $\$$ | $3,495.56$ | $\$$ | $3,576.91$ | $\$$ | $3,776.29$ | $\$$ | $4,016.80$ | $\$$ | $4,933.84$ | $\$$ |
| Number of Active Retirees |  | 150 |  | 104 |  | 171 |  | 173 |  | 770 |  |

[^21]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

| PERS Plan $\mathbf{2}$ |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

[^22]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

| PERS Plan 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Effective Dates ${ }^{1}$ |  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 353.70 | \$ | 479.36 | \$ | 768.60 | \$ | 1,074.86 | \$ | 1,548.70 | \$ | 1,788.16 |
| Average Final Salary (Monthly) | \$ | 4,664.91 | \$ | 4,706.12 | \$ | 4,964.99 | \$ | 5,480.57 | \$ | 6,169.68 | \$ | 6,006.73 |
| Number of Active Retirees |  | 99 |  | 96 |  | 67 |  | 102 |  | 96 |  | 74 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 326.31 | \$ | 506.34 | \$ | 796.50 | \$ | 1,123.54 | \$ | 1,383.54 | \$ | 1,690.94 |
| Average Final Salary (Monthly) | \$ | 4,499.32 | \$ | 4,640.98 | \$ | 5,090.91 | \$ | 5,678.77 | \$ | 5,511.32 | \$ | 5,758.12 |
| Number of Active Retirees |  | 93 |  | 65 |  | 69 |  | 97 |  | 90 |  | 78 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 349.56 | \$ | 464.15 | \$ | 732.71 | \$ | 1,079.98 | \$ | 1,456.36 | \$ | 1,701.71 |
| Average Final Salary (Monthly) | \$ | 4,695.89 | \$ | 4,418.39 | \$ | 4,744.94 | \$ | 5,710.41 | \$ | 5,865.60 | \$ | 5,987.62 |
| Number of Active Retirees |  | 84 |  | 56 |  | 68 |  | 67 |  | 48 |  | 52 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 287.76 | \$ | 435.93 | \$ | 704.13 | \$ | 940.02 | \$ | 1,415.65 | \$ | 1,796.37 |
| Average Final Salary (Monthly) | \$ | 4,436.89 | \$ | 4,220.74 | \$ | 4,816.97 | \$ | 5,293.55 | \$ | 5,929.81 | \$ | 6,378.63 |
| Number of Active Retirees |  | 58 |  | 60 |  | 61 |  | 70 |  | 61 |  | 37 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 241.09 | \$ | 404.62 | \$ | 682.89 | \$ | 935.99 | \$ | 1,393.48 | \$ | 1,664.84 |
| Average Final Salary (Monthly) | \$ | 4,045.67 | \$ | 3,928.43 | \$ | 4,681.79 | \$ | 4,828.04 | \$ | 5,589.99 | \$ | 6,199.43 |
| Number of Active Retirees |  | 30 |  | 45 |  | 64 |  | 56 |  | 49 |  | 18 |
| Period 7/1/2009 to 6/30/2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 206.96 | \$ | 372.48 | \$ | 650.80 | \$ | 898.92 | \$ | 1,237.32 | \$ | 1,399.82 |
| Average Final Salary (Monthly) | \$ | 3,977.34 | \$ | 3,840.32 | \$ | 4,624.96 | \$ | 4,778.36 | \$ | 5,284.05 | \$ | 5,238.95 |
| Number of Active Retirees |  | 14 |  | 41 |  | 50 |  | 40 |  | 30 |  | 17 |
| Period 7/1/2008 to 6/30/2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 203.00 | \$ | 370.16 | \$ | 590.03 | \$ | 868.92 | \$ | 1,140.46 | \$ | 959.19 |
| Average Final Salary (Monthly) | \$ | 3,144.81 | \$ | 3,813.15 | \$ | 4,340.40 | \$ | 5,186.33 | \$ | 5,312.97 | \$ | 3,803.49 |
| Number of Active Retirees |  | 22 |  | 39 |  | 40 |  | 38 |  | 32 |  | 1 |
| Period 7/1/2007 to 6/30/2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 221.06 | \$ | 345.57 | \$ | 542.98 | \$ | 800.74 | \$ | 1,220.33 | \$ | - |
| Average Final Salary (Monthly) | \$ | 3,288.42 | \$ | 4,204.58 | \$ | 4,249.64 | \$ | 4,623.07 | \$ | 5,530.27 | \$ | - |
| Number of Active Retirees |  | 23 |  | 32 |  | 44 |  | 22 |  | 15 |  | - |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 248.25 | \$ | 355.02 | \$ | 492.07 | \$ | 825.20 | \$ | 1,066.43 | \$ | - |
| Average Final Salary (Monthly) | \$ | 3,227.02 | \$ | 4,094.89 | \$ | 3,994.40 | \$ | 4,749.23 | \$ | 5,518.83 | \$ | - |
| Number of Active Retirees |  | 9 |  | 24 |  | 34 |  | 25 |  | 11 |  | - |


| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average Monthly Benefit | $\$$ | 250.54 | $\$$ | 330.93 | $\$$ | 430.38 | $\$$ | 781.75 | $\$$ | 848.25 | $\$$ |
| Average Final Salary (Monthly) | $\$$ | $4,241.98$ | $\$$ | $3,707.32$ | $\$$ | $4,000.23$ | $\$$ | $4,518.98$ | $\$$ | $4,933.97$ | $\$$ |
| Number of Active Retirees |  | 12 |  | 34 |  | 51 |  | 21 | - |  |  |

[^23]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

| SERS Plan $\mathbf{2}$ |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |  |

[^24]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

| SERS Plan 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 207.81 | \$ | 289.89 | \$ | 424.98 | \$ | 590.73 | \$ | 836.68 | \$ | 1,157.83 |
| Average Final Salary (Monthly) | \$ | 2,725.94 | \$ | 2,583.33 | \$ | 2,691.20 | \$ | 2,915.61 | \$ | 3,323.25 | \$ | 3,749.84 |
| Number of Active Retirees |  | 136 |  | 182 |  | 153 |  | 241 |  | 147 |  | 69 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 195.52 | \$ | 292.50 | \$ | 434.43 | \$ | 565.35 | \$ | 758.22 | \$ | 1,115.16 |
| Average Final Salary (Monthly) | \$ | 2,650.92 | \$ | 2,682.89 | \$ | 2,755.34 | \$ | 2,798.40 | \$ | 3,080.10 | \$ | 3,628.01 |
| Number of Active Retirees |  | 126 |  | 161 |  | 143 |  | 200 |  | 122 |  | 71 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 177.27 | \$ | 265.79 | \$ | 355.84 | \$ | 568.30 | \$ | 814.29 | \$ | 1,043.69 |
| Average Final Salary (Monthly) | \$ | 2,488.97 | \$ | 2,326.54 | \$ | 2,309.34 | \$ | 2,813.97 | \$ | 3,255.70 | \$ | 3,449.99 |
| Number of Active Retirees |  | 132 |  | 138 |  | 162 |  | 184 |  | 106 |  | 48 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 162.22 | \$ | 264.03 | \$ | 350.01 | \$ | 557.10 | \$ | 748.97 | \$ | 946.98 |
| Average Final Salary (Monthly) | \$ | 2,333.34 | \$ | 2,426.20 | \$ | 2,244.00 | \$ | 2,853.50 | \$ | 2,945.74 | \$ | 3,105.56 |
| Number of Active Retirees |  | 107 |  | 81 |  | 150 |  | 160 |  | 78 |  | 31 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 199.62 | \$ | 265.46 | \$ | 347.98 | \$ | 527.52 | \$ | 801.12 | \$ | 970.47 |
| Average Final Salary (Monthly) | \$ | 2,644.80 | \$ | 2,303.44 | \$ | 2,351.06 | \$ | 2,730.05 | \$ | 3,289.12 | \$ | 3,223.70 |
| Number of Active Retirees |  | 76 |  | 81 |  | 133 |  | 131 |  | 86 |  | 28 |
| Period 7/1/2009 to 6/30/2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 179.29 | \$ | 250.79 | \$ | 345.57 | \$ | 504.72 | \$ | 737.83 | \$ | 1,141.89 |
| Average Final Salary (Monthly) | \$ | 2,441.66 | \$ | 2,254.72 | \$ | 2,330.69 | \$ | 2,659.54 | \$ | 2,888.18 | \$ | 4,035.92 |
| Number of Active Retirees |  | 41 |  | 46 |  | 77 |  | 92 |  | 39 |  | 5 |
| Period 7/1/2008 to 6/30/2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 142.97 | \$ | 253.20 | \$ | 325.52 | \$ | 458.37 | \$ | 660.37 | \$ | 851.43 |
| Average Final Salary (Monthly) | \$ | 2,070.97 | \$ | 2,338.58 | \$ | 2,190.72 | \$ | 2,412.90 | \$ | 2,879.59 | \$ | 2,972.85 |
| Number of Active Retirees |  | 43 |  | 50 |  | 106 |  | 88 |  | 47 |  | 3 |
| Period 7/1/2007 to 6/30/2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 179.78 | \$ | 222.28 | \$ | 309.46 | \$ | 448.52 | \$ | 688.02 | \$ | - |
| Average Final Salary (Monthly) | \$ | 2,549.16 | \$ | 2,011.46 | \$ | 2,321.32 | \$ | 2,566.71 | \$ | 3,084.89 | \$ | - |
| Number of Active Retirees |  | 25 |  | 62 |  | 100 |  | 80 |  | 35 |  | - |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 120.59 | \$ | 215.61 | \$ | 327.88 | \$ | 370.12 | \$ | 803.06 | \$ | - |
| Average Final Salary (Monthly) | \$ | 2,141.06 | \$ | 2,086.67 | \$ | 2,413.29 | \$ | 2,203.55 | \$ | 3,744.44 | \$ | - |
| Number of Active Retirees |  | 12 |  | 37 |  | 56 |  | 42 |  | 15 |  | - |
| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 158.83 | \$ | 209.91 | \$ | 294.67 | \$ | 345.13 | \$ | 533.98 | \$ | - |
| Average Final Salary (Monthly) | \$ | 2,050.86 | \$ | 2,042.36 | \$ | 2,119.57 | \$ | 2,091.65 | \$ | 2,833.81 | \$ | - |
| Number of Active Retirees |  | 18 |  | 56 |  | 74 |  | 57 |  | 16 |  | - |

[^25]Schedule of Average Benefit Payments to Service Retirees (cont.)

| PSERS Plan $2^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
|  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |  |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 668.47 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | 5,087.53 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | 17 |  | - |  | - |  | - |  | - |  | - |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 666.76 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | 5,168.06 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | 15 |  | - |  | - |  | - |  | - |  | - |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 510.68 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | 5,261.25 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | 16 |  | - |  | - |  | - |  | - |  | - |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 339.82 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | 4,376.32 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | 9 |  | - |  | - |  | - |  | - |  | - |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 324.12 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | 4,822.01 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | 6 |  | - |  | - |  | - |  | - |  | - |
| Period 7/1/2009 to 6/30/2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 271.60 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | 5,230.39 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | 3 |  | - |  | - |  | - |  | - |  | - |

${ }^{1}$ PSERS Plan 2 became effective July 1, 2006.
${ }^{2}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

Source: Office of the State Actuary

## Schedule of Average Benefit Payments to Service Retirees (cont.)

| TRS Plan l |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |

[^26]Source: Office of the State Actuary

## Schedule of Average Benefit Payments to Service Retirees (cont.)

| TRS Plan 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 508.94 | \$ | 1,177.99 | \$ | 2,034.14 | \$ | 2,514.55 | \$ | 3,094.29 | \$ | 4,103.13 |
| Average Final Salary (Monthly) | \$ | 4,167.38 | \$ | 4,573.45 | \$ | 5,878.92 | \$ | 6,226.79 | \$ | 6,168.76 | \$ | 6,449.36 |
| Number of Active Retirees |  | 63 |  | 44 |  | 84 |  | 133 |  | 55 |  | 50 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 484.37 | \$ | 1,142.52 | \$ | 1,850.92 | \$ | 2,509.87 | \$ | 3,200.19 | \$ | 3,986.80 |
| Average Final Salary (Monthly) | \$ | 3,682.29 | \$ | 4,621.38 | \$ | 5,436.82 | \$ | 6,290.13 | \$ | 6,282.34 | \$ | 6,753.01 |
| Number of Active Retirees |  | 88 |  | 50 |  | 88 |  | 126 |  | 65 |  | 53 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 483.41 | \$ | 1,029.99 | \$ | 1,904.03 | \$ | 2,302.44 | \$ | 2,928.52 | \$ | 3,588.57 |
| Average Final Salary (Monthly) | \$ | 3,666.26 | \$ | 4,265.74 | \$ | 5,590.87 | \$ | 5,843.14 | \$ | 5,920.89 | \$ | 6,298.04 |
| Number of Active Retirees |  | 53 |  | 40 |  | 129 |  | 97 |  | 53 |  | 37 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 469.38 | \$ | 1,098.85 | \$ | 1,815.96 | \$ | 2,256.40 | \$ | 2,970.89 | \$ | 3,762.08 |
| Average Final Salary (Monthly) | \$ | 3,553.53 | \$ | 4,411.40 | \$ | 5,558.73 | \$ | 5,771.40 | \$ | 6,059.92 | \$ | 6,219.80 |
| Number of Active Retirees |  | 79 |  | 54 |  | 98 |  | 97 |  | 48 |  | 33 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 417.71 | \$ | 1,147.78 | \$ | 1,783.60 | \$ | 2,052.93 | \$ | 3,094.93 | \$ | 3,559.00 |
| Average Final Salary (Monthly) | \$ | 3,507.78 | \$ | 4,578.42 | \$ | 5,406.28 | \$ | 5,582.93 | \$ | 6,034.27 | \$ | 6,283.35 |
| Number of Active Retirees |  | 59 |  | 66 |  | 92 |  | 54 |  | 52 |  | 19 |
| Period 7/1/2009 to 6/30/2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 511.71 | \$ | 1,228.38 | \$ | 1,902.99 | \$ | 2,012.05 | \$ | 3,025.53 | \$ | 3,167.60 |
| Average Final Salary (Monthly) | \$ | 3,830.95 | \$ | 4,964.28 | \$ | 5,759.54 | \$ | 5,413.19 | \$ | 5,762.55 | \$ | 5,520.72 |
| Number of Active Retirees |  | 42 |  | 47 |  | 47 |  | 42 |  | 41 |  | 13 |
| Period 7/1/2008 to 6/30/2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 520.28 | \$ | 1,146.03 | \$ | 1,602.18 | \$ | 2,141.67 | \$ | 2,938.41 | \$ | 3,665.93 |
| Average Final Salary (Monthly) | \$ | 3,516.21 | \$ | 4,585.47 | \$ | 5,136.98 | \$ | 5,467.87 | \$ | 5,809.95 | \$ | 6,295.83 |
| Number of Active Retirees |  | 35 |  | 44 |  | 62 |  | 46 |  | 43 |  | 2 |
| Period 7/1/2007 to 6/30/2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 537.82 | \$ | 1,086.65 | \$ | 1,606.56 | \$ | 1,966.69 | \$ | 2,706.92 | \$ | - |
| Average Final Salary (Monthly) | \$ | 3,638.09 | \$ | 4,523.98 | \$ | 5,073.16 | \$ | 5,226.25 | \$ | 5,376.41 | \$ | - |
| Number of Active Retirees |  | 37 |  | 52 |  | 67 |  | 42 |  | 20 |  | - |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 375.95 | \$ | 970.16 | \$ | 1,585.44 | \$ | 1,911.48 | \$ | 2,622.91 | \$ | - |
| Average Final Salary (Monthly) | \$ | 3,634.96 | \$ | 4,054.58 | \$ | 4,891.30 | \$ | 5,337.42 | \$ | 5,601.05 | \$ | - |
| Number of Active Retirees |  | 24 |  | 28 |  | 20 |  | 16 |  | 5 |  | - |
| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 515.76 | \$ | 1,042.26 | \$ | 1,516.39 | \$ | 1,875.65 | \$ | 2,282.00 | \$ | - |
| Average Final Salary (Monthly) | \$ | 3,562.09 | \$ | 4,270.10 | \$ | 4,672.24 | \$ | 4,924.09 | \$ | 4,870.42 | \$ | - |
| Number of Active Retirees |  | 47 |  | 49 |  | 48 |  | 53 |  | 18 |  | - |

[^27]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

| TRS Plan 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
| Retirement Effective Dates ${ }^{1}$ |  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 356.11 | \$ | 631.90 | \$ | 961.06 | \$ | 1,318.54 | \$ | 1,675.09 | \$ | 2,007.23 |
| Average Final Salary (Monthly) | \$ | 4,799.72 | \$ | 5,380.43 | \$ | 5,918.12 | \$ | 6,307.98 | \$ | 6,508.21 | \$ | 6,580.13 |
| Number of Active Retirees |  | 137 |  | 214 |  | 224 |  | 264 |  | 216 |  | 289 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 354.31 | \$ | 628.17 | \$ | 946.36 | \$ | 1,274.12 | \$ | 1,661.82 | \$ | 1,944.26 |
| Average Final Salary (Monthly) | \$ | 4,564.18 | \$ | 5,273.10 | \$ | 5,799.82 | \$ | 6,236.91 | \$ | 6,569.09 | \$ | 6,484.91 |
| Number of Active Retirees |  | 130 |  | 198 |  | 208 |  | 231 |  | 193 |  | 269 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 345.92 | \$ | 593.34 | \$ | 961.44 | \$ | 1,242.35 | \$ | 1,572.79 | \$ | 1,909.04 |
| Average Final Salary (Monthly) | \$ | 4,553.37 | \$ | 5,264.59 | \$ | 5,891.15 | \$ | 6,152.65 | \$ | 6,282.97 | \$ | 6,453.23 |
| Number of Active Retirees |  | 150 |  | 179 |  | 165 |  | 227 |  | 167 |  | 140 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 331.43 | \$ | 570.43 | \$ | 863.21 | \$ | 1,139.55 | \$ | 1,610.39 | \$ | 1,737.76 |
| Average Final Salary (Monthly) | \$ | 4,727.90 | \$ | 5,068.13 | \$ | 5,473.33 | \$ | 5,966.01 | \$ | 6,235.28 | \$ | 6,143.64 |
| Number of Active Retirees |  | 108 |  | 164 |  | 151 |  | 184 |  | 131 |  | 105 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 336.03 | \$ | 545.30 | \$ | 831.33 | \$ | 1,125.89 | \$ | 1,568.81 | \$ | 1,686.38 |
| Average Final Salary (Monthly) | \$ | 4,553.15 | \$ | 4,830.15 | \$ | 5,435.01 | \$ | 5,780.35 | \$ | 6,160.69 | \$ | 6,065.22 |
| Number of Active Retirees |  | 106 |  | 113 |  | 122 |  | 136 |  | 120 |  | 68 |
| Period 7/1/2009 to 6/30/2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 319.39 | \$ | 545.45 | \$ | 786.31 | \$ | 1,078.33 | \$ | 1,453.56 | \$ | 1,699.32 |
| Average Final Salary (Monthly) | \$ | 4,468.37 | \$ | 4,766.92 | \$ | 5,254.99 | \$ | 5,634.96 | \$ | 5,839.55 | \$ | 5,992.94 |
| Number of Active Retirees |  | 79 |  | 73 |  | 91 |  | 75 |  | 79 |  | 22 |
| Period 7/1/2008 to 6/30/2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 303.61 | \$ | 547.01 | \$ | 796.81 | \$ | 993.91 | \$ | 1,500.99 | \$ | 1,419.21 |
| Average Final Salary (Monthly) | \$ | 4,534.11 | \$ | 5,211.68 | \$ | 5,389.18 | \$ | 5,394.30 | \$ | 5,833.52 | \$ | 5,397.36 |
| Number of Active Retirees |  | 76 |  | 53 |  | 84 |  | 77 |  | 83 |  | 5 |
| Period 7/1/2007 to 6/30/2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 267.19 | \$ | 514.88 | \$ | 753.87 | \$ | 923.79 | \$ | 1,207.54 | \$ | - |
| Average Final Salary (Monthly) | \$ | 3,949.74 | \$ | 4,680.85 | \$ | 5,313.06 | \$ | 5,444.54 | \$ | 5,366.59 | \$ | - |
| Number of Active Retirees |  | 62 |  | 60 |  | 89 |  | 78 |  | 48 |  | - |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 254.63 | \$ | 452.49 | \$ | 712.80 | \$ | 1,061.00 | \$ | 1,243.51 | \$ | - |
| Average Final Salary (Monthly) | \$ | 4,146.59 | \$ | 4,575.87 | \$ | 4,909.18 | \$ | 5,447.02 | \$ | 5,750.52 | \$ | - |
| Number of Active Retirees |  | 19 |  | 22 |  | 24 |  | 22 |  | 4 |  | - |
| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 297.95 | \$ | 448.22 | \$ | 666.82 | \$ | 869.07 | \$ | 1,101.94 | \$ | - |
| Average Final Salary (Monthly) | \$ | 4,392.04 | \$ | 4,659.35 | \$ | 4,950.00 | \$ | 5,187.16 | \$ | 5,239.94 | \$ | - |
| Number of Active Retirees |  | 32 |  | 45 |  | 73 |  | 41 |  | 20 |  | - |

[^28]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

## LEOFF Plan 1

| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |  |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 3,891 | \$ | 8,081.82 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 6,708 | \$ | 9,859.16 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | 1 |  | 40 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 3,690 | \$ | 7,788.21 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 6,220 | \$ | 9,665.96 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | 1 |  | 23 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 7,105.97 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 9,171.69 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | - |  | 42 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 6,776.58 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 8,906.14 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | - |  | 63 |


| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Monthly Benefit | \$ | - | \$ | 2,608.42 | \$ | - | \$ | - | \$ | 3,770.38 | \$ | 6,799.27 |
| Average Final Salary (Monthly) | \$ | - | \$ | 12,347.54 | \$ | - | \$ | - | \$ | 6,693.02 | \$ | 9,117.73 |
| Number of Active Retirees |  | - |  | 1 |  | - |  | - |  | 1 |  | 49 |

Period 7/1/2009 to 6/30/2010

| Average Monthly Benefit | $\$$ | - | $\$$ | - | $\$$ | - | $\$$ | - | $\$$ | $5,846.14$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Average Final Salary (Monthly) | $\$$ | - | $\$$ | - | $\$$ | - | $\$$ | - | $\$$ | $9,964.96$ |$\$$


| Number of Active Retirees | - | - | - | 1 |
| :--- | :--- | :--- | :--- | :--- |


| Period 7/1/2008 to 6/30/2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 8,876.88 | \$ | 5,773.59 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 13,656.74 | \$ | 8,293.04 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | 1 |  | 67 |
| Period 7/1/2007 to 6/30/2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | 737.71 | \$ | - | \$ | 4,083.42 | \$ | 3,717.62 | \$ | 5,275.22 |
| Average Final Salary (Monthly) | \$ | - | \$ | 2,147.00 | \$ | - | \$ | 8,695 | \$ | 6,687.05 | \$ | 7,715.25 |
| Number of Active Retirees |  | - |  | 1 |  | - |  | 2 |  | 9 |  | 85 |


| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Monthly Benefit | \$ | - | \$ | 1,086 | \$ | - | \$ | - | \$ | 3,785.27 | \$ | 5,086.57 |
| Average Final Salary (Monthly) | \$ | - | \$ | 5,204 | \$ | - | \$ | - | \$ | 6,727.37 | \$ | 7,548.05 |
| Number of Active Retirees |  | - |  | 1 |  | - |  | - |  | 20 |  | 63 |
| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 3,628 | \$ | - | \$ | - | \$ | 3,307.40 | \$ | 3,999.96 | \$ | 4,870.88 |
| Average Final Salary (Monthly) | \$ | 6,596 | \$ | - | \$ | - | \$ | 6,549.30 | \$ | 7,104.56 | \$ | 7,484.82 |
| Number of Active Retirees |  | 1 |  | - |  | - |  | 1 |  | 47 |  | 80 |

[^29]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

## LEOFF Plan 2

| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 887.31 | \$ | 1,696.16 | \$ | 2,488.40 | \$ | 3,750.72 | \$ | 4,733.82 | \$ | 5,936.02 |
| Average Final Salary (Monthly) | \$ | 6,230.50 | \$ | 6,686.77 | \$ | 7,183.01 | \$ | 8,294.40 | \$ | 8,604.70 | \$ | 9,482.73 |
| Number of Active Retirees |  | 17 |  | 18 |  | 49 |  | 95 |  | 118 |  | 155 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 803.11 | \$ | 1,600.48 | \$ | 2,477.29 | \$ | 3,531.18 | \$ | 4,758.98 | \$ | 5,607.91 |
| Average Final Salary (Monthly) | \$ | 6,199.64 | \$ | 6,603.23 | \$ | 7,405.91 | \$ | 7,967.27 | \$ | 8,837.62 | \$ | 9,087.48 |
| Number of Active Retirees |  | 27 |  | 18 |  | 30 |  | 107 |  | 100 |  | 149 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 751.29 | \$ | 1,612.33 | \$ | 2,510.38 | \$ | 3,404.26 | \$ | 4,547.01 | \$ | 5,529.49 |
| Average Final Salary (Monthly) | \$ | 5,948.81 | \$ | 6,336.73 | \$ | 7,145.42 | \$ | 7,691.69 | \$ | 8,400.58 | \$ | 9,100.80 |
| Number of Active Retirees |  | 27 |  | 25 |  | 32 |  | 63 |  | 123 |  | 132 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 918.50 | \$ | 1,913.13 | \$ | 2,270.71 | \$ | 3,261.72 | \$ | 4,377.04 | \$ | 5,398.33 |
| Average Final Salary (Monthly) | \$ | 5,730.21 | \$ | 7,272.37 | \$ | 6,685.73 | \$ | 7,510.37 | \$ | 8,172.98 | \$ | 8,963.58 |
| Number of Active Retirees |  | 21 |  | 17 |  | 30 |  | 61 |  | 82 |  | 112 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 786.80 | \$ | 1,346.38 | \$ | 2,628.43 | \$ | 3,229.83 | \$ | 4,442.23 | \$ | 5,010.17 |
| Average Final Salary (Monthly) | \$ | 6,436.60 | \$ | 5,505.96 | \$ | 7,191.87 | \$ | 7,200.29 | \$ | 8,131.03 | \$ | 8,349.92 |
| Number of Active Retirees |  | 21 |  | 17 |  | 31 |  | 71 |  | 104 |  | 73 |

## Period 7/1/2009 to 6/30/2010

| Average Monthly Benefit | \$ | 802.80 | \$ | 1,430.37 | \$ | 2,176.26 | \$ | 2,935.73 | \$ | 4,107.79 | \$ | 4,329.19 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Final Salary (Monthly) | \$ | 5,885.87 | \$ | 5,662.91 | \$ | 6,203.07 | \$ | 6,911.64 | \$ | 7,594.47 | \$ | 7,264.63 |
| Number of Active Retirees |  | 24 |  | 17 |  | 21 |  | 43 |  | 99 |  | 33 |

## Period 7/1/2008 to 6/30/2009

| Average Monthly Benefit | \$ | 826.57 | \$ | 1,481.13 | \$ | 2,064.59 | \$ | 2,981.51 | \$ | 3,846.34 | \$ | 4,459.60 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Final Salary (Monthly) | \$ | 6,372.71 | \$ | 5,884.19 | \$ | 5,940.37 | \$ | 6,704.73 | \$ | 7,298.28 | \$ | 7,742.83 |
| Number of Active Retirees |  | 15 |  | 17 |  | 29 |  | 42 |  | 83 |  | 13 |

Period 7/1/2007 to 6/30/2008

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average Monthly Benefit | $\$$ | 782.60 | $\$$ | $1,146.25$ | $\$$ | $2,063.68$ | $\$$ | $2,806.54$ | $\$$ | $3,455.45$ | $\$$ |
| Average Final Salary (Monthly) | $\$$ | $5,913.15$ | $\$$ | $5,141.47$ | $\$$ | $6,100.96$ | $\$$ | $6,573.92$ | $\$$ | $6,853.86$ | $\$$ |
| Number of Active Retirees |  | 16 |  | 18 |  | 26 |  | 47 | - |  |  |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | $\$$ | 730.74 | $\$$ | $1,419.11$ | $\$$ | $2,036.97$ | $\$$ | $2,944.90$ | $\$$ | $3,301.90$ | $\$$ |
| Average Final Salary (Monthly) | $\$$ | $5,214.92$ | $\$$ | $5,723.21$ | $\$$ | $6,063.32$ | $\$$ | $6,574.48$ | $\$$ | $6,490.35$ | $\$$ |
| Number of Active Retirees | 10 |  | 15 |  | 24 | $6,032.87$ |  |  |  |  |  |


| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Average Monthly Benefit | $\$$ | 603.71 | $\$$ | $1,133.58$ | $\$$ | $1,965.38$ | $\$$ | $2,733.20$ | $\$$ | $3,186.75$ | $\$$ |
| Average Final Salary (Monthly) | $\$$ | $4,482.80$ | $\$$ | $4,740.11$ | $\$$ | $5,532.82$ | $\$$ | $6,249.84$ | $\$$ | $6,319.38$ | $\$$ |
| Number of Active Retirees |  | 16 |  | 19 |  | 24 |  | 65 | - |  |  |

[^30]
## Schedule of Average Benefit Payments to Service Retirees (cont.)

| WSPRS Plan 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
|  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |  |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 515.10 | \$ | 1,616.68 | \$ | 3,108.68 | \$ | 4,153.86 | \$ | 4,386.37 | \$ | 4,883.71 |
| Average Final Salary (Monthly) | \$ | 6,961.40 | \$ | 6,969.05 | \$ | 7,161.79 | \$ | 8,328.60 | \$ | 8,007.96 | \$ | 7,820.79 |
| Number of Active Retirees |  | 1 |  | 2 |  | 2 |  | 16 |  | 24 |  | 3 |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | 2,075.14 | \$ | 2,290.15 | \$ | 3,490.49 | \$ | 4,335.50 | \$ | 4,441.61 |
| Average Final Salary (Monthly) | \$ | - | \$ | 5,791.02 | \$ | 4,655.27 | \$ | 7,110.57 | \$ | 7,755.76 | \$ | 7,017.09 |
| Number of Active Retirees |  | - |  | 1 |  | 1 |  | 14 |  | 20 |  | 4 |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | 1,946.46 | \$ | 3,228.52 | \$ | 3,916.57 | \$ | 4,033.93 | \$ | 5,808.61 |
| Average Final Salary (Monthly) | \$ | - | \$ | 7,447.17 | \$ | 9,971.82 | \$ | 8,046.79 | \$ | 7,561.30 | \$ | 8,363.83 |
| Number of Active Retirees |  | - |  | 2 |  | 2 |  | 12 |  | 30 |  | 9 |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 332.19 | \$ | 1,371.65 | \$ | 1,641.71 | \$ | 4,047.82 | \$ | 4,524.91 | \$ | 3,944.59 |
| Average Final Salary (Monthly) | \$ | 4,280.74 | \$ | 5,911.76 | \$ | 5,475.29 | \$ | 7,926.38 | \$ | 8,487.26 | \$ | 6,294.76 |
| Number of Active Retirees |  | 1 |  | 2 |  | 2 |  | 19 |  | 20 |  | 3 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | 1,300.91 | \$ | 3,981.43 | \$ | 4,307.44 | \$ | 3,807.43 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | 5,279.73 | \$ | 7,767.77 | \$ | 7,696.70 | \$ | 6,534.53 |
| Number of Active Retirees |  | - |  | - |  | 1 |  | 14 |  | 20 |  | 1 |
| Period 7/1/2009 to 6/30/2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | 3,603.10 | \$ | 5,653.44 | \$ | 5,437.71 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | 7,241.18 | \$ | 9,302.30 | \$ | 8,000.30 |
| Number of Active Retirees |  | - |  | - |  | - |  | 9 |  | 10 |  | 3 |
| Period 7/1/2008 to 6/30/2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | 3,205.87 | \$ | 3,984.48 | \$ | 5,748.34 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | 6,495.52 | \$ | 7,139.94 | \$ | 8,014.31 |
| Number of Active Retirees |  | - |  | - |  | - |  | 2 |  | 7 |  | 3 |
| Period 7/1/2007 to 6/30/2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | 395.27 | \$ | - | \$ | - | \$ | 3,166.53 | \$ | 4,129.05 | \$ | 4,313.40 |
| Average Final Salary (Monthly) | \$ | 5,784.65 | \$ | - | \$ | - | \$ | 6,685.85 | \$ | 7,573.82 | \$ | 6,621.25 |
| Number of Active Retirees |  | 1 |  | - |  | - |  | 5 |  | 6 |  | 6 |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | 1,385.52 | \$ | 2,000.54 | \$ | - | \$ | 3,887.12 | \$ | 4,422.67 |
| Average Final Salary (Monthly) | \$ | - | \$ | 5,980.57 | \$ | 5,755.62 | \$ | - | \$ | 7,254.30 | \$ | 6,698.61 |
| Number of Active Retirees |  | - |  | 1 |  | 1 |  | - |  | 5 |  | 6 |
| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 3,488.08 | \$ | 3,996.14 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 6,559.78 | \$ | 6,112.68 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | 15 |  | 7 |

[^31]Schedule of Average Benefit Payments to Service Retirees (cont.)

| JRS |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retirement Effective Dates ${ }^{1}$ | Years of Credited Service |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 5-10 |  | 11-15 |  | 16-20 |  | 21-25 |  | 26-30 |  | 31+ |
| Period 7/1/2014 to 6/30/2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | - |  | - |
| Period 7/1/2013 to 6/30/2014 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | - |  | - |
| Period 7/1/2012 to 6/30/2013 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 9,302.01 | \$ | - |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 12,402.68 | \$ | - |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | 2 |  | - |
| Period 7/1/2011 to 6/30/2012 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 10,263.81 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 13,685.08 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | - |  | 1 |
| Period 7/1/2010 to 6/30/2011 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 7,376.49 | \$ | 9,302.01 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 12,402.68 | \$ | 12,402.68 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | 1 |  | 1 |
| Period 7/1/2009 to 6/30/2010 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | 7,904.34 | \$ | 8,292.69 | \$ | 9,770.51 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | 13,027.34 | \$ | 12,402.60 | \$ | 13,027.34 |
| Number of Active Retirees |  | - |  | - |  | - |  | 1 |  | 2 |  | 1 |
| Period 7/1/2008 to 6/30/2009 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | 5,286.59 | \$ | 9,301.95 | \$ | - | \$ | - |
| Average Final Salary (Moonthly) | \$ | - | \$ | - | \$ | 10,367.60 | \$ | 12,402.60 | \$ | - | \$ | - |
| Number of Active Retirees |  | - |  | - |  | 1 |  | 1 |  | - |  | - |
| Period 7/1/2007 to 6/30/2008 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 9,255.00 |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 12,340.00 |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | - |  | 1 |
| Period 10/1/2006 to 6/30/2007 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - |
| Number of Active Retirees |  | - |  | - |  | - |  | - |  | - |  | - |
| Period 10/1/2005 to 9/30/2006 |  |  |  |  |  |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$ | - | \$ | - | \$ | 6,242.30 | \$ | - | \$ | 8,412.38 | \$ | - |
| Average Final Salary (Monthly) | \$ | - | \$ | - | \$ | 9,987.16 | \$ | - | \$ | 11,216.50 | \$ | - |
| Number of Active Retirees |  | - |  | - |  | 2 |  | - |  | 1 |  | - |

[^32]Source: Office of the State Actuary
※્̛ Schedule of Benefit Expenses and Refunds by Type

| PERS Plan 1 <br> For the Years Ended 2007-2016 - Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 1,103,092 | \$ | 1,104,025 | \$ | 1,095,467 | \$ | 1,088,705 | \$ | 1,082,344 | \$ | 1,059,536 | \$ | 1,024,555 | \$ | 987,383 | \$ | 947,353 | \$ | 901,730 |
| Disability |  | 11,646 |  | 12,222 |  | 13,240 |  | 13,496 |  | 13,810 |  | 14,431 |  | 14,718 |  | 14,871 |  | 15,121 |  | 14,950 |
| Survivor |  | 84,098 |  | 82,718 |  | 80,789 |  | 79,180 |  | 77,529 |  | 75,555 |  | 72,113 |  | 68,675 |  | 65,460 |  | 62,315 |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | 2,912 |  | 3,171 |  | 3,373 |  | 3,365 |  | 3,667 |  | 2,930 |  | 3,997 |  | 3,612 |  | 4,011 |  | 4,194 |
| Death |  | 1,461 |  | 858 |  | 846 |  | 633 |  | 887 |  | 540 |  | 949 |  | 1,459 |  | 1,562 |  | 2,021 |
| Total | \$ | 1,203,209 | \$ | 1,202,994 | \$ | 1,193,715 | \$ | 1,185,379 | \$ | 1,178,237 | \$ | 1,152,992 | \$ | 1,116,332 | \$ | 1,076,000 | \$ | 1,033,507 | \$ | 985,210 |
| PERS Plan 2/3 <br> For the Years Ended 2007-2016 - Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 734,381 | \$ | 626,959 | \$ | 531,509 | \$ | 430,352 | \$ | 350,550 | \$ | 287,560 | \$ | 230,776 | \$ | 188,971 | \$ | 154,388 | \$ | 129,890 |
| Disability |  | 13,645 |  | 13,217 |  | 12,417 |  | 11,695 |  | 10,901 |  | 10,140 |  | 9,795 |  | 9,014 |  | 8,294 |  | 7,669 |
| Survivor |  | 28,188 |  | 25,232 |  | 21,734 |  | 18,028 |  | 15,548 |  | 13,243 |  | 11,194 |  | 9,334 |  | 7,635 |  | 6,243 |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | 28,527 |  | 28,494 |  | 28,119 |  | 28,286 |  | 30,148 |  | 27,956 |  | 25,005 |  | 22,798 |  | 24,498 |  | 21,866 |
| Death |  | 7,778 |  | 7,004 |  | 7,083 |  | 7,393 |  | 5,568 |  | 5,730 |  | 6,420 |  | 3,644 |  | 2,076 |  | 4,599 |
| Total | \$ | 812,519 | \$ | 700,906 | \$ | 600,862 | \$ | 495,754 | \$ | 412,715 | \$ | 344,629 | \$ | 283,190 | \$ | 233,761 | \$ | 196,891 | \$ | 170,267 |

Schedule of Benefit Expenses and Refunds by Type (cont.)

| PERS Plan 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 3,731 | \$ | 2,640 | \$ | 1,435 | \$ | 697 | \$ | 322 | \$ | 164 | \$ | 80 | \$ | 51 | \$ | 23 | \$ | - |
| Disability |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Survivor |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | 84,734 | \$ | 89,446 | \$ | 80,489 |  | 68,671 |  | 66,095 |  | 56,974 |  | 40,215 |  | 38,856 |  | 35,702 |  | 33,724 |
| Death |  | - |  | - |  | - |  | - |  | 150 |  | 2,169 |  | 1,508 |  | 1,346 |  | 2,589 |  | 1,530 |
| Total | \$ | 88,465 | \$ | 92,086 | \$ | 81,924 | \$ | 69,368 | \$ | 66,567 | \$ | 59,307 | \$ | 41,803 | \$ | 40,253 | \$ | 38,314 | \$ | 35,254 |


※ Schedule of Benefit Expenses and Refunds by Type (cont.)



PSERS Plan 2 became effective July $1,2006$.

Schedule of Benefit Expenses and Refunds by Type (cont.)

| TRS Plan 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| For the Years Ended 2007-2016 - Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | $6 / 30 / 2011$ |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 866,940 | \$ | 870,547 | \$ | 871,366 | \$ | 860,631 | \$ | 860,848 | \$ | 847,353 | \$ | 809,214 | \$ | 801,974 | \$ | 798,668 | \$ | 757,896 |
| Disability |  | 9,529 |  | 10,013 |  | 10,074 |  | 10,606 |  | 10,618 |  | 11,111 |  | 10,905 |  | 11,068 |  | 11,186 |  | 11,301 |
| Survivor |  | 47,908 |  | 46,455 |  | 44,535 |  | 43,372 |  | 42,398 |  | 41,355 |  | 39,131 |  | 37,220 |  | 35,132 |  | 33,147 |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | 976 |  | 915 |  | 1,348 |  | 1,512 |  | 1,120 |  | 1,389 |  | 574 |  | 930 |  | 827 |  | 841 |
| Death |  | 206 |  | 640 |  | 914 |  | 478 |  | 432 |  | 431 |  | 930 |  | 330 |  | 173 |  | 1,037 |
| Total | \$ | 925,559 | \$ | 928,570 | \$ | 928,237 | \$ | 916,599 | \$ | 915,416 | \$ | 901,639 | \$ | 860,754 | \$ | 851,522 | \$ | 845,986 | \$ | 804,222 |

## TRS Plan 2/3

For the Years Ended 2007-2016 — Dollars in Thousands

|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 211,967 | \$ | 177,689 | \$ | 144,464 | \$ | 112,521 | \$ | 87,707 | \$ | 68,782 | \$ | 52,921 | \$ | 42,587 | \$ | 33,984 | \$ | 26,770 |
| Disability |  | 1,145 |  | 1,176 |  | 1,126 |  | 1,117 |  | 1,071 |  | 1,118 |  | 921 |  | 838 |  | 882 |  | 732 |
| Survivor |  | 4,899 |  | 4,347 |  | 3,932 |  | 3,024 |  | 2,622 |  | 2,238 |  | 1,812 |  | 1,370 |  | 1,150 |  | 1,032 |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | 2,409 |  | 2,401 |  | 1,460 |  | 2,115 |  | 1,652 |  | 1,584 |  | 2,092 |  | 1,423 |  | 1,712 |  | 2,284 |
| Death |  | 562 |  | 439 |  | 528 |  | 799 |  | 517 |  | 697 |  | 776 |  | 766 |  | 478 |  | 442 |
| Total | \$ | 220,982 | \$ | 186,052 | \$ | 151,510 | \$ | 119,576 | \$ | 93,569 | \$ | 74,419 | \$ | 58,522 | \$ | 46,984 | \$ | 38,206 | \$ | 31,260 |

※ Schedule of Benefit Expenses and Refunds by Type (cont.)

| TRS Plan 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 9,146 | \$ | 5,924 | \$ | 3,084 | \$ | 1,569 | \$ | 1,149 | \$ | 542 | \$ | 257 | \$ | 128 | \$ | 45 | \$ | 18 |
| Disability |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Survivor |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | 272,792 | \$ | 263,454 | \$ | 232,551 |  | 176,052 |  | 150,404 |  | 110,425 |  | 67,158 |  | 74,586 |  | 82,756 |  | 59,658 |
| Death |  | - |  | - |  | - |  | - |  | - |  | 5,146 |  | 4,507 |  | 1,580 |  | 2,020 |  | 3,152 |
| Total | \$ | 281,938 | \$ | 269,378 | \$ | 235,635 | \$ | 177,621 | \$ | 151,553 | \$ | 116,113 | \$ | 71,922 | \$ | 76,294 | \$ | 84,821 | \$ | 62,828 |
| LEOFF Plan 1 <br> For the Years Ended 2007-2016 — Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | /30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 149,411 | \$ | 147,957 | \$ | 146,285 | \$ | 143,906 | \$ | 138,884 | \$ | 134,321 | \$ | 132,450 | \$ | 126,562 | \$ | 119,464 | \$ | 112,073 |
| Disability |  | 141,526 |  | 143,951 |  | 145,666 |  | 146,643 |  | 146,207 |  | 147,653 |  | 150,521 |  | 148,846 |  | 145,795 |  | 143,468 |
| Survivor |  | 69,547 |  | 66,503 |  | 63,789 |  | 61,247 |  | 58,347 |  | 56,801 |  | 55,260 |  | 51,625 |  | 48,271 |  | 44,911 |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | 440 |  | 330 |  | 248 |  | 14 |  | 4 |  | 48 |  | 11 |  | 43 |  | - |  | 1 |
| Death |  | - |  | 4 |  | - |  | - |  | 431 |  | - |  | 3 |  | 150 |  | 150 |  | 10 |
| Total | \$ | 360,924 | \$ | 358,745 | \$ | 355,988 | \$ | 351,810 | \$ | 343,873 | \$ | 338,823 | \$ | 338,245 | \$ | 327,226 | \$ | 313,680 | \$ | 300,463 |

Schedule of Benefit Expenses and Refunds by Type (cont.)


※ Schedule of Benefit Expenses and Refunds by Type (cont.)


Schedule of Benefit Expenses and Refunds by Type (cont.)

| JRF <br> For the Years Ended 2007-2016 — Dollars in Thousands |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  | 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  | 6/30/2008 |  | 6/30/2007 |  |
| Benefit Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service | \$ | 347 | \$ | 346 | \$ | 346 | \$ | 402 | \$ | 421 | \$ | 420 | \$ | 421 | \$ | 422 | \$ | 466 | \$ | 483 |
| Disability |  | - |  | - |  | - |  | 72 |  | - |  | - |  | - |  | - |  | - |  | - |
| Survivor |  | 93 |  | 98 |  | 98 |  | - |  | 61 |  | 79 |  | 79 |  | 79 |  | 79 |  | 98 |
| Refunds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separations |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Death |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Total | \$ | 440 | \$ | 444 | \$ | 444 | \$ | 474 | \$ | 482 | \$ | 499 | \$ | 500 | \$ | 501 | \$ | 545 | \$ | 581 |

## Deferred Compensation Program Status Report

## DCP Status Report <br> Dollars in Thousands - Page 1 of 2

|  | 6/30/2016 |  | 6/30/2015 |  | 6/30/2014 |  | 6/30/2013 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Funding Media | Plan Balance | \% | Plan <br> Balance | \% | Plan Balance | \% | Plan <br> Balance | \% |
| Active U.S. Core Stock Fund ${ }^{1}$ | \$ - | - | \$ - | - | \$ - | - | \$ - | - |
| Active U.S. Value Stock Fund ${ }^{1}$ | - | - | - | - | - | - | - | - |
| Calvert Social Investment | - | - | - | - | - | - | - | - |
| Fund - Balanced Portfolio | - | - | - | - | - | - | - | - |
| Emerging Market Equity Index ${ }^{2}$ | 49,471 | 1.37\% | 56,912 | 1.58\% | 59,894 | 1.68\% | 54,693 | 1.71\% |
| Fidelity Equity-Income Fund | - | - | - | - | - | - | - | - |
| Fidelity Growth Company Fund ${ }^{1}$ | - | - | - | - | - | - | - | - |
| Fidelity Independence Fund | - | - | - | - | - | - | - | - |
| Fidelity Overseas Fund | - | - | - | - | - | - | - | - |
| Global Equity Index ${ }^{2}$ | 116,099 | 3.21\% | 121,679 | 3.37\% | 114,142 | 3.19\% | 84,495 | 2.64\% |
| International Stock Fund ${ }^{1}$ | - | - | - | - | - | - | - | - |
| Savings Pool | 868,269 | 23.98\% | 863,001 | 23.91\% | 937,359 | 26.21\% | 1,000,437 | 31.27\% |
| U.S. Large Cap Equity Index ${ }^{2}$ | 384,369 | 10.61\% | 364,343 | 10.09\% | 312,282 | 8.74\% | 227,917 | 7.12\% |
| U.S. Small Cap Equity Index ${ }^{2}$ | 179,182 | 4.95\% | 188,368 | 5.22\% | 199,588 | 5.58\% | 150,240 | 4.69\% |
| U.S. Small Stock Index Fund ${ }^{1}$ | - | - | - | - | - | - | - | - |
| U.S. Stock Market Index Fund ${ }^{1}$ | - | - | - | - | - | - | - | - |
| Washington State Bond Fund ${ }^{3}$ | 242,947 | 6.71\% | 230,429 | 6.38\% | 222,168 | 6.21\% | 257,135 | 8.04\% |
| Washington State Long-Horizon Fund | - | - | - | - | - | - | - | - |
| Washington State Mid-Horizon Fund | - | - | - | - | - | - | - | - |
| Washington State Short-Horizon Fund | - | - | - | - | - | - | - | - |
| Washington State Socially Responsible Balanced Fund | 141,740 | 3.91\% | 132,229 | 3.66\% | 128,312 | 3.59\% | 109,148 | 3.41\% |
| Retirement Maturity Strategy Fund ${ }^{4}$ | 24,052 | 0.66\% | 23,772 | 0.66\% | 24,999 | 0.70\% | 25,468 | 0.80\% |
| Retirement Strategy $2005^{4}$ | 36,136 | 1.00\% | 37,874 | 1.05\% | 39,905 | 1.12\% | 38,443 | 1.20\% |
| Retirement Strategy $2010{ }^{4}$ | 100,244 | 2.77\% | 111,130 | 3.08\% | 121,329 | 3.39\% | 117,647 | 3.68\% |
| Retirement Strategy $2015{ }^{4}$ | 280,694 | 7.75\% | 313,588 | 8.69\% | 332,310 | 9.29\% | 290,316 | 9.07\% |
| Retirement Strategy $2020{ }^{4}$ | 399,657 | 11.04\% | 401,305 | 11.12\% | 380,889 | 10.65\% | 308,468 | 9.64\% |
| Retirement Strategy $2025^{4}$ | 324,826 | 8.97\% | 313,852 | 8.70\% | 288,862 | 8.08\% | 223,555 | 6.99\% |
| Retirement Strategy $2030{ }^{4}$ | 205,154 | 5.67\% | 197,681 | 5.48\% | 183,453 | 5.13\% | 143,763 | 4.49\% |
| Retirement Strategy $2035{ }^{4}$ | 134,634 | 3.72\% | 129,075 | 3.58\% | 120,809 | 3.38\% | 91,183 | 2.85\% |
| Retirement Strategy $2040{ }^{4}$ | 72,012 | 1.99\% | 68,789 | 1.90\% | 61,489 | 1.72\% | 44,745 | 1.40\% |
| Retirement Strategy $2045^{4}$ | 36,635 | 1.01\% | 32,737 | 0.91\% | 28,288 | 0.79\% | 19,892 | 0.62\% |
| Retirement Strategy $2050{ }^{4}$ | 12,411 | 0.34\% | 10,782 | 0.30\% | 9,694 | 0.27\% | 5,706 | 0.18\% |
| Retirement Strategy $2055^{5}$ | 10,319 | 0.28\% | 9,760 | 0.27\% | 9,964 | 0.28\% | 6,358 | 0.20\% |
| Retirement Strategy $2060^{6}$ | 2,172 | 0.06\% | 1,801 | 0.05\% | - | - | - | - |
| Total | \$3,621,024 | 100.00\% | \$3,609,107 | 100.00\% | \$3,575,736 | 100.00 \% | \$3,199,609 | 100.00\% |

${ }^{1}$ This investment option was discontinued in October 2011.
${ }^{2}$ This investment option was added in October 2011.
${ }^{3}$ This fund replaced the Fidelity Intermediate Bond Fund as of September 1, 2000.
${ }^{4}$ This investment option was added in October 2008. Retirement Maturity Strategy Fund replaced Retirement Strategy 2000 in January 2015.
${ }^{5}$ This investment option was added in January 2010.
${ }^{6}$ This investment option was added in January 2015.

## Deferred Compensation Program Status Report (cont.)

| DCP Status Report <br> Dollars in Thousands - Page 2 of 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6/30/2012 |  | 6/30/2011 |  | 6/30/2010 |  | 6/30/2009 |  |  | 6/30/2008 |  | 6/30/2007 |  |
| $\begin{array}{r} \text { Plan } \\ \text { Balance } \end{array}$ | \% | $\begin{array}{r} \text { Plan } \\ \text { Balance } \end{array}$ | \% | $\begin{array}{r} \text { Plan } \\ \text { Balance } \end{array}$ | \% |  | Plan Balance | \% | $\begin{array}{r} \text { Plan } \\ \text { Balance } \end{array}$ | \% | $\begin{array}{r} \text { Plan } \\ \text { Balance } \end{array}$ | \% |
| \$ - | - | \$ 238,087 | 8.11\% | \$ 192,558 | 7.87\% | \$ | 180,558 | 8.34\% | \$ 267,879 | 11.02\% | \$ 352,142 | 13.82\% |
| - | - | 299,662 | 10.20\% | 245,272 | 10.03\% |  | 213,669 | 9.87\% | 326,400 | 13.43\% | 500,501 | 19.65\% |
| - | - | - | - | - | - |  | - | - | - | - | - | - |
| - | - | - | - | - | - |  | - | - | - | - | - | - |
| 52,542 | 1.79\% | - | - | - | - |  | - | - | - | - | - | - |
| - | - | - | - | - | - |  | - | - | - | - | - | - |
| - | - | 366,490 | 12.48\% | 268,855 | 10.99\% |  | 224,090 | 10.35\% | 315,284 | 12.97\% | 279,402 | 10.97\% |
| - | - | - | - | - | - |  | - | - | - | - | - | - |
| - | - | - | - | - | - |  | - | - | - | - | - | - |
| 65,500 | 2.23\% | - | - | - | - |  | - | - | - | - | - | - |
| - | - | 123,184 | 4.20\% | 97,897 | 4.00\% |  | 89,981 | 4.16\% | 140,526 | 5.78\% | 167,724 | 6.58\% |
| 1,045,569 | 35.66\% | 1,013,313 | 34.51\% | 959,255 | 39.21\% |  | 954,969 | 44.10 \% | 819,272 | 33.71\% | 723,624 | 28.41\% |
| 178,250 | 6.08\% | - | - | - | - |  | - | - | - | - | - | - |
| 109,915 | 3.75\% | - | - | - | - |  | - | - | - | - | - | - |
| - | - | 116,776 | 3.98\% | 77,248 | 3.16\% |  | 52,854 | 2.44\% | 64,641 | 2.66\% | 87,907 | 3.45\% |
| - | - | 163,011 | 5.55\% | 124,866 | 5.10\% |  | 102,935 | 4.75\% | 134,940 | 5.55\% | 152,066 | 5.97\% |
| 267,316 | 9.12\% | 179,032 | 6.10\% | 178,187 | 7.28\% |  | 134,101 | 6.19\% | 132,298 | 5.44\% | 87,000 | 3.42\% |
| - | - | - | - | - | - |  | - | - | 64,478 | 2.65\% | 62,784 | 2.46\% |
| - | - | - | - | - | - |  | - | - | 72,182 | 2.97\% | 61,143 | 2.40\% |
| - | - | - | - | - | - |  | - | - | 34,602 | 1.42\% | 24,892 | 0.98\% |
| 101,014 | 3.45\% | 73,021 | 2.49\% | 58,828 | 2.41\% |  | 49,115 | 2.27\% | 58,317 | 2.40\% | 48,082 | 1.89\% |
| 24,435 | 0.83\% | 6,312 | 0.21\% | 3,973 | 0.16\% |  | 3,458 | 0.16\% | - | - | - | - |
| 35,891 | 1.22\% | 11,313 | 0.39\% | 9,269 | 0.38\% |  | 6,919 | 0.32\% | - | - | - | - |
| 115,133 | 3.93\% | 48,294 | 1.64\% | 38,435 | 1.57\% |  | 29,057 | 1.34\% | - | - | - | - |
| 253,859 | 8.66\% | 100,846 | 3.43\% | 69,852 | 2.86\% |  | 44,406 | 2.05\% | - | - | - | - |
| 256,143 | 8.74\% | 81,120 | 2.76\% | 51,674 | 2.11\% |  | 34,220 | 1.58\% | - | - | - | - |
| 179,951 | 6.14\% | 50,278 | 1.71\% | 30,265 | 1.24\% |  | 19,402 | 0.90\% | - | - | - | - |
| 114,916 | 3.92\% | 29,300 | 1.00\% | 17,133 | 0.70\% |  | 10,986 | 0.51\% | - | - | - | - |
| 73,173 | 2.50\% | 17,332 | 0.59\% | 10,869 | 0.44\% |  | 7,444 | 0.34\% | - | - | - | - |
| 35,038 | 1.19\% | 10,251 | 0.35\% | 6,417 | 0.26\% |  | 4,163 | 0.19\% | - | - | - | - |
| 14,996 | 0.51\% | 5,554 | 0.19\% | 3,301 | 0.14\% |  | 2,215 | 0.10\% | - | - | - | - |
| 4,355 | 0.15\% | 2,228 | 0.08\% | 1,491 | 0.06\% |  | 882 | 0.04\% | - | - | - | - |
| 3,868 | 0.13\% | 1,023 | 0.03\% | 769 | 0.03\% |  | - | - | - | - | - | - |
| - | - | - | - | - | - |  | - | - | - | - | - | - |
| \$2,931,864 | 100.00\% | \$2,936,427 | 100.00\% | \$2,446,414 | 100.00\% |  | ,165,424 | 100.00\% | \$2,430,819 | 100.00\% | \$2,547,267 | 100.00\% |

## Deferred Compensation Program Performance

## DCP Performance

Performance Periods Ending June 30, 2016

| Fund Name Benchmark | Quarter Ending 6/30/2016 | Performance History ${ }^{1}$ Average Annual Total Returns |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 Year | 3 Years ${ }^{2}$ | 5 Years $^{2}$ | 10 Years/ Since Inception |
| Emerging Market Equity Index Fund | 0.67\% | (12.18)\% | (1.44)\% | - | 2.09\% |
| MSCI Emerging Markets Investable Market Index | 0.62\% | (12.16)\% | (1.36)\% | - | 2.30\% |
| Global Equity Index Fund | 1.17\% | (3.37)\% | 6.61\% | - | 10.71\% |
| MSCI ACWI Investable Market Index | 1.06\% | (3.87)\% | 6.13\% | - | 10.19\% |
| Savings Pool | 0.31\% | 93.00\% | 0.71\% | 1.22\% | 2.74\% |
| U.S. Large Cap Equity Index Fund | 2.46\% | 4.02\% | 11.71\% | 12.16\% | 7.54\% |
| S\&P 500 Index | 2.46\% | 3.99\% | 11.66\% | 12.10\% | 7.42\% |
| U.S. Small Cap Value Equity Index Fund | 4.40\% | (2.35)\% | 6.65\% | 8.15\% | 5.19\% |
| Russell 2000 Value Index | 4.31\% | (2.58)\% | 6.36\% | 8.15\% | 5.15\% |
| Washington State Bond Fund | 2.83\% | 5.28\% | 4.38\% | 4.21\% | 6.05\% |
| Barclays Capital Intermediate Credit Index | 2.12\% | 4.97\% | 3.88\% | 3.96\% | 5.38\% |
| Washington State Socially Responsible Balanced Fund | 2.27\% | 5.85\% | 7.90\% | 7.62\% | 7.01\% |
| Custom Benchmark ${ }^{3}$ | 1.91\% | 2.50\% | 7.23\% | 7.82\% | 6.38\% |
| Retirement Maturity Strategy Fund ${ }^{4}$ | 1.72\% | 2.64\% | 4.49\% | 4.32\% | 6.23\% |
| 2000 Composite Benchmark ${ }^{3}$ | 1.50\% | 2.65\% | 4.35\% | 4.43\% | 5.83\% |
| 2005 Retirement Strategy | 1.77\% | 1.96\% | 4.97\% | 4.82\% | 6.83\% |
| 2005 Composite Benchmark ${ }^{3}$ | 1.60\% | 2.07\% | 4.92\% | 5.05\% | 6.50\% |
| 2010 Retirement Strategy | 1.77\% | 1.23\% | 5.43\% | 5.29\% | 7.31\% |
| 2010 Composite Benchmark ${ }^{3}$ | 1.72\% | 1.43\% | 5.46\% | 5.63\% | 7.14\% |
| 2015 Retirement Strategy | 1.79\% | 0.51\% | 5.85\% | 5.62\% | 7.59\% |
| 2015 Composite Benchmark ${ }^{3}$ | 1.83\% | 0.76\% | 5.92\% | 6.07\% | 7.47\% |
| 2020 Retirement Strategy | 1.73\% | (0.23)\% | 6.06\% | 5.76\% | 7.64\% |
| 2020 Composite Benchmark ${ }^{3}$ | 1.82\% | 0.15\% | 6.17\% | 6.29\% | 7.61\% |
| 2025 Retirement Strategy | 1.66\% | (0.89)\% | 6.25\% | 5.89\% | 7.68\% |
| 2025 Composite Benchmark ${ }^{3}$ | 1.77\% | (0.50)\% | 6.40\% | 6.49\% | 7.74\% |
| 2030 Retirement Strategy | 1.56\% | (1.51)\% | 6.41\% | 5.97\% | 7.57\% |
| 2030 Composite Benchmark ${ }^{3}$ | 1.71\% | (1.12)\% | 6.59\% | 6.66\% | 7.73\% |
| 2035 Retirement Strategy | 1.35\% | (2.22)\% | 6.34\% | 5.84\% | 7.27\% |
| 2035 Composite Benchmark ${ }^{3}$ | 1.55\% | (1.88)\% | 6.59\% | 6.62\% | 7.54\% |
| 2040 Retirement Strategy | 1.18\% | (2.77)\% | 6.31\% | 5.80\% | 7.24\% |
| 2040 Composite Benchmark ${ }^{3}$ | 1.29\% | (2.51)\% | 6.56\% | 6.61\% | 7.54\% |
| 2045 Retirement Strategy | 1.12\% | (2.88)\% | 6.27\% | 5.78\% | 7.26\% |
| 2045 Composite Benchmark ${ }^{3}$ | 1.22\% | (2.62)\% | 6.52\% | 6.59\% | 7.52\% |
| 2050 Retirement Strategy | 1.11\% | (2.82)\% | 6.29\% | 5.80\% | 7.28\% |
| 2050 Composite Benchmark ${ }^{3}$ | 1.22\% | (2.62)\% | 6.52\% | 6.59\% | 7.52\% |
| 2055 Retirement Strategy | 1.07\% | (2.83)\% | 6.27\% | 5.80\% | 6.57\% |
| 2055 Composite Benchmark ${ }^{3}$ | 1.22\% | (2.62)\% | 6.52\% | 6.59\% | 7.69\% |
| 2060 Retirement Strategy ${ }^{5}$ | 1.11\% | (2.80)\% | - | - | 0.34\% |
| 2060 Composite Benchmark ${ }^{3}$ | 1.22\% | (2.62)\% | - | - | 0.34\% |

${ }^{1}$ Current performance might be lower or higher than the performance data shown. Quoted performance data represents past performance and is not a guarantee or prediction of future results. For performance data current to the most recent month-end, visit www.drs.wa.gov/dcp. The investment return and principal value of an investment will fluctuate so that, when redeemed, shares/units might be worth more or less than their original costs. All returns are calculated in U.S. dollars.
${ }^{2}$ Dashed spaces indicate that data is not available. These funds have not been in existence long enough to have performance history for these periods.
${ }^{3}$ For the Washington State Socially Responsible Balanced Fund Custom Benchmark and all Composite Benchmark years 2000 through 2060, the benchmark returns are estimated based on what the portfolio would have earned using the return data from the various components.
${ }^{4}$ Retirement Maturity Strategy Fund replaced Retirement Strategy 2000 in January 2015.
${ }^{5}$ This investment option was added in January 2015.
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## Deferred Compensation Program Performance (cont.)

## DCP Net Investment Asset Growth

For the Fiscal Years Ended June 30, 2007-2016 — Dollars in Millions


## DCP Participation

For the Fiscal Years Ended June 30, 2007-2016


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## . :::0


www.drs.wa.gov


[^0]:    18 DRS $\nabla$ Financial Section - Comprehensive Annual Financial Report

[^1]:    The accompanying notes are an integral part of this statement.

[^2]:    'The Washington State Investment Board provided the money-weighted rates of return.
    ${ }^{2}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^3]:    'The Washington State Investment Board provided the money-weighted rates of return.
    ${ }^{2}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^4]:    ${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.
    ${ }^{2}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^5]:    ${ }^{1}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^6]:    ${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.
    ${ }^{2}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^7]:    ${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.

[^8]:    ${ }^{1}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^9]:    ${ }^{1}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^10]:    ${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.
    ${ }^{2}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^11]:    ${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.
    ${ }^{2}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^12]:    ${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.
    ${ }^{2}$ The Washington State Investment Board provided the CMAs and expected rates of return. The Office of the State Actuary relied on the CMAs in its selection of the long-term expected rate of return for purposes of GASB Statement No. 67.

[^13]:    ${ }^{1}$ The Washington State Investment Board provided the money-weighted rates of return.

[^14]:    ${ }^{1}$ Plan Fiduciary Net Position does not include the administrative fund allocations to the trust funds noted in Note 1, Section G, of the Financial Section.
    This schedule will be built prospectively until it contains 10 years of data.

[^15]:    Rates have been rounded for display purposes.

[^16]:    Source: Washington State Office of the State Actuary

[^17]:    154 DRS $\nabla$ Actuarial Section - Comprehensive Annual Financial Report

[^18]:    ${ }^{1}$ Actuarial value of assets

[^19]:    ${ }^{1}$ Actuarial value of assets
    Source: Office of the State Actuary

[^20]:    Sources: Unless otherwise noted, the information in this section's schedules comes from the comprehensive annual financial reports for the years being discussed.

[^21]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^22]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^23]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^24]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^25]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^26]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

[^27]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^28]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^29]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^30]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^31]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

    Source: Office of the State Actuary

[^32]:    ${ }^{1}$ Average monthly benefit and average final salary (monthly) figures include members at retirement who might not be audited. Retirees with missing or invalid data elements were excluded.

