Comprehensive Annual Financial Report

For the Fiscal Year Ended June 30, 2018

Oregon Public Employees Retirement System

An Agency of the State of Oregon

OREGON
PERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Front Cover Photo: South Sister from Sparks Lake

Taken by: Radford Bean

OREGON PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Comprehensive Annual Financial Report

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Kevin Olineck

Director

Jessica Williams, MPA, CPFO

Chief Financial Officer

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Oregon

Kate Brown, Governor

Public Employees Retirement System
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November 30, 2018

Public Employees Retirement Board
Oregon Public Employees Retirement System
11410 SW 68th Parkway
Tigard, Oregon 97223

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the Oregon Public Employees Retirement System (PERS, System or Agency) for the fiscal year ended June 30, 2018. This report includes all funds over which the Public Employees Retirement Board (Board) exercises authority. These funds were established to provide retirement, death, and disability benefits, and other postemployment benefits to members; administer retiree health insurance programs; and oversee the state-sponsored deferred compensation program. As of June 30, 2018, PERS provides services to 904 employers and over 365,000 active, inactive, and retired members and beneficiaries.

The CAFR is intended to fulfill the legal requirements of Oregon Revised Statute (ORS) 238.630. PERS management is responsible for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures.

Macias Gini & O'Connell LLP (MGO) has audited the accompanying financial statements in accordance with generally accepted auditing standards and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. The independent auditor's report is included in this report.

Management's Discussion and Analysis

Included in this report is a section entitled Management's Discussion and Analysis (MD&A). This section provides a narrative introduction, overview, and analysis to accompany the basic financial statements. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. We would like to direct your attention to the MD&A that begins on page 20.

Financial Information

The financial statements contained in this report have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) as set forth in the principles established by the Governmental Accounting Standards Board (GASB), including all effective GASB pronouncements, and in conformance with the guidelines for financial reporting developed by the Government Finance Officers Association of the United States and Canada (GFOA).

Management of the System assumes full responsibility for the completeness and reliability of all of the information presented in this report. To provide a reasonable basis for making these representations, management of the System has established internal controls designed to protect the System's assets from loss, theft, or misuse and to compile sufficient reliable information for the preparation of the included financial statements. Because the cost of internal controls should not exceed their effectiveness, management has developed controls that provide reasonable, rather than absolute, assurance that the financial statements contained in this report will be free of material misstatements. As management, we assert that, to the best of our knowledge and belief, this financial report is complete and reliable in all material aspects.

Factors Affecting Economic Condition

The economic condition of the System is primarily affected by investment earnings. A comparative analysis of investment rates of return is presented on page 31 of this report.

<u>Funding</u>

The System is funded through contributions and investment earnings. For judges the contribution is set at 7.0 percent of covered salary. Employer contributions are established by actuarial valuations conducted biennially in odd-numbered calendar years. The System's funding objective is to meet long-term benefit promises through contributions that fund benefits as they accrue. An adequate contribution level, when combined with investment earnings, will result in the full funding of benefits as they come due. If the level of funding is adequate, the ratio of assets accumulated to total liabilities will increase, and more income will be available for investment. Prudent investment of assets, and returns on those investments, may increase the funding base and allow for a more stable employer contribution rate. As of the December 31, 2017 actuarial valuation, the System has a funded ratio of 80.1 percent for the defined benefit pension plan it administers, including employer side accounts, and 73.5 percent funded ratio, excluding employer side accounts.

All members, with the exception of judges, contribute 6.0 percent of salary to the Individual Account Program (IAP), an account-based benefit for all PERS members, established in 2004.

<u>Investments</u>

The Oregon Investment Council (OIC) has statutory authority (ORS 293.701) to establish policies for the investment and reinvestment of the System's funds. The System's long-term investment strategy is designed to capitalize on investment return while protecting principal. The OIC works to strategically allocate assets in the System's portfolio. The target investment portfolio mix at fair value as of June 30, 2018, is 37.50 percent public equity, 17.50 percent private equity, 20.00 percent debt securities, 12.50 percent real estate and 12.50 percent alternatives. In addition to approved asset classes, target asset allocation ranges, and rebalancing policies, the OIC further safeguards the System's investment portfolio through use of an independent custodian, defined limits on delegated authority, and independent audits. The OIC uses external portfolio managers, employing both passive (indexed) and active investment strategies. The portfolio is broadly diversified among equities, debt securities, real estate, and private equities, with additional diversification achieved through domestic and international investing. System securities are held by State Street Bank and Trust Company.

The System's Regular Investment Portfolio (Portfolio) experienced strong gains in fiscal year 2018 with a rate of return of 9.40 percent. This compares with a rate of return of 11.9 percent for fiscal year 2017. The Portfolio's trailing 10-year return was 7.48 percent. Descriptions of OIC policies regarding diversification, performance objectives, fees, and asset allocation are found on page 104.

Assumed Rate of Return on Investments

One of the most significant issues addressed by the Board during the year was a reduction in the assumed rate of return on investments.

At its July 28, 2017, meeting the Board directed its actuary to reduce the assumed rate of return on investments from 7.50 percent to 7.20 percent. The new assumed rate became effective for Tier One earnings crediting in calendar year 2018, and was used as the basis for updated actuarial equivalency factors effective January 1, 2018. The new assumed rate was also used in the actuarial valuation which established the employer contribution rates for the 2019-21 biennium.

Major Initiatives

New Director—New Board Chair

Steven Rodeman, the Director of PERS since 2014, retired in June, 2018. Kevin Olineck became the new Director of PERS in July, 2018. In addition, the governing Board experienced a leadership transition with John Thomas completing his second term as Chair. Sadhana Shenoy was confirmed as the new Chair in September, 2018. PERS would like to express their deep appreciation to both Mr. Rodeman and Mr. Thomas for their significant contributions to PERS during their tenure.

Strategic Management System

PERS continues to evolve its outcome-based management system to improve operational performance and organizational alignment. This process-based system integrates problem solving and decision making with active engagement from the front-line staff who perform daily work.

The 2018-2023 PERS Strategic Plan was updated during the year to reflect five strategic priorities, with several areas of focus and specific, achievable goals and objectives. The five strategic priorities are:

1. Organizational Management and Development;
2. Member Services and Communications;
3. Data Reliability;
4. Information Governance, Security, and Technology; and
5. Financial Management.

For each of the strategic priorities, PERS is using existing strategic and operational planning functions to prioritize and allocate resources. Strategies will be implemented using a variety of approaches. The approaches include problem solving, project management, breakthrough initiatives, and integration into core business practices. Specific performance metrics will be identified for tracking progress as part of strategy initiation.

Supporting the Agency's strategic priorities are six core operating processes and six core supporting processes. Each process has an owner, sub-processes, and outcome measures to monitor and document progress. Quarterly target review meetings are held to review progress and identify areas for improvement.

Employer Incentive Fund, UAL Resolution Program, and School District Side Account Program

During the February 2018 Legislative session, Senate Bill 1566 was approved. This bill established the Employer Incentive Fund (EIF) Program which will allow eligible employers to receive matching funds if they apply and make a qualifying deposit into a side account. The Agency is working to establish an application process for qualifying deposits and employers are eager to participate. Currently identified revenue for the EIF Program is a portion of the increase in the repatriation of corporate tax revenue that may be available in 2021. For school districts participating in the School District Side Account Program, revenue may be available from five different streams over the next nine years. These revenue streams include a portion of the increase in the repatriation of corporate tax revenue, a portion of debt collection, capital gains and estate taxes, and interest from unclaimed property. The Agency is implementing these programs and will refine as needed.

Information Security and Continuity Management Programs

The Agency is continuing to work with the Office of the State Chief Information Officer to establish formal Information Security and Continuity Management Programs. Planning and implementation coincide with appropriate requests and approval of capital and required resources for implementation.

Individual Account Program Change to Target Date Funds

As noted previously, the OIC is responsible for all System investments. The OIC approved the transition to a TDF investment methodology for all IAP accounts beginning January 1, 2018. The Agency communicated with members about this investment transition, which will be visible to most members in spring 2019 when member annual statements are distributed, reflecting 2018 earnings.

Member and Employer Satisfaction Surveys

A member satisfaction survey conducted in fiscal year 2018 showed an increase in member satisfaction. Member satisfaction increased from 87 percent in the previous year, to 91 percent in the current year. These responses reflect an initiative to increase survey responses from active members. An employer satisfaction survey reported a satisfaction rating of 89 percent in 2018, a slight drop of the previous year. This drop is reflective of challenges in navigating the System's website and indicate a need for additional education and training relating to employer statements (invoices).

Changes to Assumed Rate of Return on Investments

As mentioned previously, the Board directed its actuary to reduce the assumed rate of return on investments from 7.50 percent to 7.20 percent in July of 2017.

Awards and Acknowledgements

Certificate of Achievement

The Certificate of Achievement for Excellence in Financial Reporting is applicable for the year ended June 30, 2017. The Certificate of Achievement is a prestigious national award that recognizes conformance with the highest standards of preparation of state and local government financial reports.

To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR, whose contents conform to program standards. The CAFR must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is valid for one year. The System has received a Certificate of Achievement for the last 27 consecutive years. We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to the GFOA.

Public Pension Standards Award

The Public Pension Coordinating Council (PPCC) awarded the 2018 Public Pension Standards Award to PERS for its plan design and administration.

The PPCC is a coalition of three associations representing public pension funds covering the vast majority of public employees in the United States. The associations are as follows: the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR). Public pension standards are intended to reflect minimum expectations for public retirement system management and administration, and to serve as benchmarks by which all defined benefit public plans are measured.

This is the 16th year the PPCC has offered the award to public retirement systems and the 15th consecutive year PERS has applied for, and received, the award.

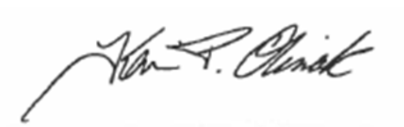
Acknowledgments

The information contained in this report is used for making management decisions, to demonstrate stewardship of the assets entrusted to the System, and to comply with legal and accounting provisions. Staff strive to provide reliable and complete information for these purposes. The compilation of this report reflects the combined efforts of the PERS Financial Services Division.

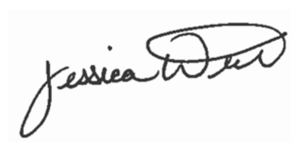
This report is available on the PERS website at http://www.oregon.gov/pers/Pages/Financials/Actuarial-Financial-Information.aspx, and a link to this document will be e-mailed to all PERS employers. Summary financial information and the website link will be reported in the PERS newsletter, *Perspectives,* which is distributed to active and retired members.

We would like to thank the PERS Board and staff, participating employers, the Oregon Investment Council, the Office of the State Treasurer, and all others working on behalf of the System for their time, commitment, support and hard work. We are grateful for their continued support and assistance.

Respectfully submitted,



Kevin Olineck
Director



Jessica Williams, MPA, CPFO
Chief Financial Officer

Public Employees Retirement Board

The Oregon Legislature has delegated authority to the Public Employees Retirement System (PERS) Board of Trustees to administer the PERS system. The Board is composed of five trustees who administer retirement (service and disability), death, and retiree health insurance benefits. PERS also administers the Oregon Savings Growth Plan, a deferred compensation program for state and local government employees.

All members of the Board are appointed by the state governor and confirmed by the state Senate. The governor designates the chairperson.

Statute specifies Board membership must consist of three people with experience in business management, pension management, or investing who are not members of the PERS system; one person who is either an employee of the state in a management position, or a person who holds an elective office in the governing body of a participating public employer other than the state; and one person representing public employees and retirees.

As of September 30, 2018, the three Board members representing business management, pension management, or investing are Krystal deAsis, Sadhana Shenoy (Board Chair), and Stephen Buckley. Steve Demarest was appointed to represent public employees and retirees; Lawrence Furnstahl (Vice-Chair) was appointed to represent public employers. Terms for each member are staggered.

Sadhana Shenoy (Board Chair)

Sadhana Shenoy has spent the last five years in the Mobility-as-a-Service (MaaS) space. She was the CFO/COO of Moovel, a transit technology company, and has held this position as the company has grown from start-up, to acquisition and into growth stages. She started her career as a software engineer working with databases and children's software. She then moved to the non-profit sector, working on Boards within the environmental (Sierra Club), educational (Montessori School of Beaverton) and legal (CRAG Law Center) areas. Ms. Shenoy is a Charter and Board Member of TiE Oregon (The Indus Entrepreneurs) and of TYE Oregon (TiE Youth Entrepreneurs) and enjoys angel investing in exciting new ideas and promoting youth entrepreneurship.

Ms. Shenoy holds Bachelor of Science degrees in Accounting and Business Administration, a Master of Science degree in Computer Science and is a Certified Public Accountant (CPA) in Oregon.

Lawrence Furnstahl (vice-chair)

Lawrence J. Furnstahl has three decades of experience in the strategic, financial and operational management of complex organizations, including universities and academic health centers. Mr. Furnstahl has served as a chief financial officer for over 25 years. He is now the Executive Vice President and Chief Financial Officer of Oregon Health & Science University (OHSU). OHSU is a $2.3 billion public corporation with 2,500 faculty, 15,000 staff, 4,000 students and trainees. OHSU participates in $350 million of research and is the state's only major academic health center. Prior to joining OHSU in January 2011, Mr. Furnstahl served as the Chief Financial and Strategy Officer with the University of Chicago Medical Center and Biological Sciences Division. Over the years, he has also served as the Vice President for Financial Planning for Science for University of Chicago; Senior Vice President and Chief Financial Officer for UCSF Stanford Health Care; Vice President and Chief Financial Officer for the University of Chicago; and Vice President and Treasurer of Patient Services for the University of Chicago Hospitals. Mr. Furnstahl is a member of the Visiting Committee to the Physical Sciences Division of the University of Chicago, and a board director and former Chair of the Hyde Park Art Center. He is a 1983 graduate of the College of the University of Chicago, in economics.

Krystal deAsis

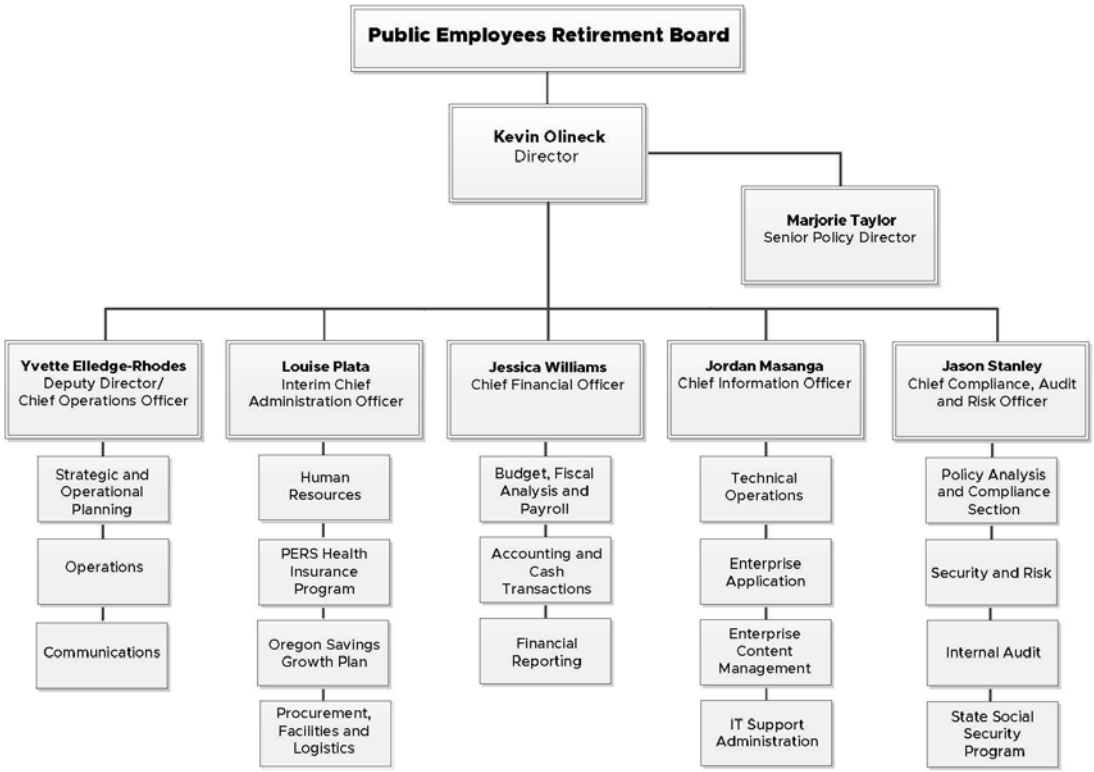
Mrs. deAsis was a financial manager for Holiday Retirement (Holiday). In this role, she was responsible for managing the finances of a portfolio of Holiday's communities and upholding financial objectives for long-term strategic planning. Prior to joining Holiday, Mrs. deAsis spent nine years with Portland General Electric Company (PGE) in a variety of financial roles. This work included oversight of the economic value of PGE's major capital investments and management of the risk of PGE's commodity trading portfolio. Mrs. deAsis currently serves as the chairwoman of the PERS Audit Committee. Additionally, Mrs. deAsis serves as Treasurer for Legacy Health – Emanuel Medical Center Foundation and sits on the Legacy Health Foundations Investment Committee. Mrs. deAsis earned her Bachelor of Arts degree in Finance from Portland State University.

Stephen Buckley

Stephen Buckley is a partner in the Portland, Oregon, law firm Brownstein Rask, LLP. For more than 25 years, Mr. Buckley has served as legal counsel for boards of trustees of private sector health and welfare plans and defined benefit, defined contribution, and 401(k) pension plans in Washington, Oregon, and California. Mr. Buckley is a speaker at employee benefit conferences sponsored by the International Foundation of Employee Benefit Plans. Mr. Buckley is a graduate of Colorado State University and received his Juris Doctorate degree from Willamette University College of Law.

Steve Demarest

Steve Demarest is an Administrative Law Judge with the Oregon Office of Administrative Hearings. In this position, he hears appeals of a wide variety of decisions by state agencies, boards, and commissions. Mr. Demarest is also the President of the Service Employees International Union (SEIU) Local 503. In this capacity, he supports the value of being "In It Together" with one another, and with the communities that SEIU serves.



Oregon Public Employees Retirement System Consultants

Actuary
Milliman, Inc.

Insurance Consultant
Butler Partners & Associates LLC

Legal Counsel
Oregon Department of Justice

Medical Advisor
F. William Miller, MD

Auditor
Macias Gini & O'Connell LLP

Investments
Investment managers are reported in the Summary of Investment Fees, Commissions, and Expenses on page 89.

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Oregon Public Employees Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO

Management would like to offer a special thank you to the Oregon Public Employees Retirement System Financial Reporting Division for their ongoing work to earn this prestigious award.

Financial Reporting Services Manager — Amanda Marble, CPA

Senior Investment Accountant — Michiru Farney

Public Pension Coordinating Council

Public Pension Standards Award
For Funding and Administration
2018

Presented to

Oregon Public Employees Retirement System

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle

Alan H. Winkle
Program Administrator

Mission

We serve the people of Oregon by administering public employee benefit trusts to pay the right person the right benefit at the right time

Core Values

Service-Focus: We work together to meet the needs of others with dependability, professionalism, and respect.

Accountability: We take ownership for our decisions, actions, and outcomes.

Integrity: We inspire trust through transparency and ethical, sound judgment.

Operating Principles

Professional: We are responsive, respectful, and sensitive to the needs of our members, employers, and staff.

Accurate: We ensure data integrity and provide consistent, dependable information and benefits.

Judicious: We use sound judgment and prudent, principled decision-making in upholding our fiduciary responsibility.

Information Security: We are constantly vigilant to safeguard confidential information.

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FINANCIAL SECTION

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Certified Public Accountants

Independent Auditor's Report

To the Honorable Kate Brown
Governor of Oregon

To the Public Employees Retirement Board of the
Oregon Public Employees Retirement System
Tigard, Oregon

Report on the Financial Statements

We have audited the accompanying financial statements of the fiduciary activities and proprietary activities of the Oregon Public Employees Retirement System (the System), an agency of the State of Oregon, as of and for the fiscal year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

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.

Auditor's Responsibility

Our responsibility is to express opinions 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. 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 auditor's 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 System'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 opinions.

Macias Gini & O'Connell LLP
3000 S Street, Suite 300
Sacramento, CA 95816

www.mgocpa.com

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the fiduciary activities and proprietary activities of the Oregon Public Employees Retirement System as of June 30, 2018, and the respective changes in financial position and, where applicable, cash flows thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matters

As discussed in Note 9 to the financial statements, the total pension liability for the Defined Benefit Pension Plan, based on the actuarial valuation as of December 31, 2016, rolled forward to June 30, 2018, exceeded the plan's fiduciary net position by $15.1 billion. The actuarial valuation is very sensitive to the underlying assumptions, including a discount rate of 7.20 percent, which represents the long-term expected rate of return.

As discussed in Note 10 to the financial statements, the fiduciary net position of the Retirement Health Insurance Account other postemployment benefit plan exceeded the total OPEB liability, based on the actuarial valuation as of December 31, 2016, rolled forward to June 30, 2018, by $111.6 million. The actuarial valuation is very sensitive to the underlying assumptions, including a discount rate of 7.20 percent, which represents the long-term expected rate of return.

As discussed in Note 10 to the financial statements, the total OPEB liability for the Retiree Health Insurance Premium Account other postemployment benefit plan, based on the actuarial valuation as of December 31, 2016, rolled forward to June 30, 2018, exceeded the plan's fiduciary net position by $35.3 million. The actuarial valuation is very sensitive to the underlying assumptions, including a discount rate of 7.20 percent, which represents the long-term expected rate of return, and a healthcare cost trend rate of 6.50 percent applied at the beginning of the measurement period and decreasing to an ultimate rate of 4.20 percent.

Our opinions are not modified with respect to these matters.

Other Matters

Prior-Year Comparative Information

The financial statements include partial prior-year comparative information. Such information does not include all of the information required to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the fiscal year ended June 30, 2017, from which such partial information was derived.

We have previously audited the System's 2017 financial statements, and we expressed unmodified audit opinions on the respective financial statements of the fiduciary activities and the proprietary activities in our report dated December 1, 2017. In our opinion, the partial comparative information presented herein as of and for the fiscal year ended June 30, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis, the schedule of changes in net pension liability/(asset) and related ratios, the schedule of investment returns - defined benefit pension plan, the schedule of defined benefit pension plan employer contributions, the schedule of changes in net OPEB (asset) and related ratios – other postemployment benefit plans – RHIA, the schedule of investment returns – other postemployment benefit plans – RHIA, the schedule of changes in net OPEB liability and related ratios – other postemployment benefit plans – RHIPA, the schedule of investment returns – other postemployment benefit plans – RHIPA, the schedule of OPEB – RHIA employer contributions, the schedule of OPEB – RHIPA employer contributions, and the schedule of claims development information, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the 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 financial statements, and other knowledge we obtained during our audit of the 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 opinions on the financial statements that collectively comprise the System's basic financial statements. The other supplementary information and introductory, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

The introductory, investment, actuarial and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 30, 2018, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Macias Gini & O'Connell LLP

Sacramento, California
November 30, 2018

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MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents management's discussion and analysis of the Oregon Public Employees Retirement System's (PERS or the System) financial performance during the fiscal year ended June 30, 2018. It is a narrative overview and analysis that we present in conjunction with the Letter of Transmittal included in the Introductory Section of this Comprehensive Annual Financial Report (CAFR). It should also be read in conjunction with PERS' basic financial statements, as presented in this report.

PERS is primarily responsible for administering retirement benefits, health benefits, and supplemental retirement savings plans. PERS comprises six funds: a defined benefit pension plan, an individual account-based benefit plan, two other postemployment benefit plans, a deferred compensation plan, and a proprietary fund.

OVERVIEW OF THE FINANCIAL STATEMENTS AND ACCOMPANYING INFORMATION

Management's discussion and analysis provides an introduction to and overview of the basic financial statements, which comprise the following components: Fund Financial Statements and Notes to the Basic Financial Statements. Collectively, this information presents the combined net position restricted for pension benefits, other postemployment benefits (OPEB), and deferred compensation, along with the unrestricted net position of the proprietary fund administered by PERS as of June 30, 2018. It also summarizes the combined changes in net position restricted for pension benefits and OPEB, the changes in unrestricted net position, and the cash flows of the proprietary fund for the year then ended, along with an actuarial measurement of the employers' total pension and other postemployment benefit liabilities compared to the fiduciary net position of the defined benefit pension and other postemployment benefit plans. The information available in each of these sections is briefly summarized below:

Fund Financial Statements

At June 30, 2018, financial statements are presented for the two types of funds administered by PERS: fiduciary funds, where PERS acts in a fiduciary capacity as a trustee for others and is responsible for administering the assets placed under its control; and a proprietary fund, where fees are charged for services provided and the focus is on determining financial position, operating and non-operating income, cash flows and changes in net position.

Fiduciary Funds – include the Defined Benefit Pension Plan, Oregon Public Service Retirement Plan Individual Account Program (IAP), the Retirement Health Insurance Account (RHIA), the Retiree Health Insurance Premium Account (RHIPA), and the Deferred Compensation Plan, known as the Oregon Savings Growth Plan. Fiduciary funds are used to account for resources held for the benefit of PERS participants. A statement of fiduciary net position and a statement of changes in fiduciary net position are presented for the fiduciary funds as of and for the year ended June 30, 2018, along with comparative total information as of and for the year ended June 30, 2017. These financial statements reflect the resources available to pay benefits to retired members and other beneficiaries as of year-end, as well as the changes in those resources during the year.

Proprietary Fund – includes the Standard Retiree Health Insurance Account (SRHIA), an enterprise fund. A statement of net position, a statement of revenues, expenses, and changes in net position, and a statement of cash flows are presented for the proprietary fund as of and for the year ended June 30, 2018, along with comparative total information as of and for the year ended June 30, 2017. These financial statements reflect the net position, changes in net position, and cash flows resulting from PERS business-type activities.

Notes to the Basic Financial Statements

- Note 1 – provides a summary of significant accounting policies, including the basis of accounting for each of the fund types: investment accounting policies, management's use of estimates, and other significant accounting policies.
- Note 2 – provides a general description of PERS as well as a description of each of the funds administered by PERS. Information regarding employer and member participation in the pension plans administered by PERS is also provided.
- Note 3 – provides information on the System's account receivables and payables.
- Note 4 – provides information on cash and cash equivalents. The note also describes investments, including the techniques and inputs used to determine fair value, investing authority, investment risk categorizations, and additional information about unfunded investment commitments, securities lending, and derivatives.
- Note 5 – provides information about capital assets used in plan operations.
- Note 6 – provides information on reserves.
- Note 7 – provides information on potential contingencies of PERS.
- Note 8 – provides information on the estimated claims liability of the SRHIA.
- Note 9 – provides information on the Employers' Net Pension Liability.
- Note 10 – provides information on Employers' Net OPEB Liability/(Asset).

Required Supplementary Information

In addition to the financial statements and notes explained above, this CAFR includes ten additional Required Supplementary Information schedules with historical trend information, as described below:

- The Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios, page 74, presents the pension plan's total pension liability, fiduciary net position, net pension liability, the change in net pension liability, fiduciary net position as a percentage of the total pension liability, total covered payroll, and net pension liability as a percentage of covered payroll. This required 10-year trend schedule will disclose future years prospectively, beginning with fiscal year ended June 30, 2014.
- The Schedule of Investment Returns – Defined Benefit Pension Plan, page 74, presents for each fiscal year the annual money-weighted return (internal rate of return) on pension plan investments, net of pension plan investment expense. This required 10-year trend schedule will disclose future years prospectively, beginning with fiscal year ended June 30, 2014.
- The Schedule of Defined Benefit Pension Plan Employer Contributions, on pages 75 – 76, contains a 10 -year schedule comparing the amount of actuarially determined contributions with the amount of contributions recognized in relation to the actuarially determined contributions, and showing whether there is a contribution deficiency or excess. The schedule also shows the amounts of contributions recognized by the pension plan in relation to the actuarially determined contributions as a percentage of covered payroll.
- The Schedules of Changes in Net OPEB Liability/(Asset) and Related Ratios, for RHIA is on page 77 and RHIPA on 78, presents the OPEB plan's total OPEB liability, fiduciary net position, net OPEB liability/(asset), and the change in net OPEB liability/(asset), fiduciary net position as a percentage of the total OPEB

liability, total covered payroll, and net OPEB liability/(asset) as a percentage of covered payroll. These required 10-year trend schedules will disclose future years prospectively, beginning with fiscal year ended June 30, 2017.

- The Schedules of Investment Returns – Other Postemployment Benefit Plans, for RHIA and RHIPA, on pages 77 and 78, respectively, presents for each fiscal year the annual money-weighted return (internal rate of return) for each of the OPEB plan investments, net of OPEB plan investment expense. These required 10-year trend schedules will disclose future years prospectively, beginning with fiscal year ended June 30, 2017.
- The Schedules of OPEB Plan Employer Contributions for both RHIA and RHIPA, on pages 79 – 82, contain a 10-year schedule comparing the amount of actuarially determined contributions with the amount of contributions recognized in relation to the actuarially determined contributions, and showing whether there is a contribution deficiency or excess. The schedules also show the amounts of contributions recognized by the OPEB plans in relation to the actuarially determined contributions as a percentage of covered payroll.
- The Schedule of Claims Development Information for SRHIA, page 83, shows earned revenues and expenses over the past eight years.

Other Supplementary Information

In addition to the Required Supplementary Information, there are five Other Supplementary Information schedules, as described below:

- The Schedule of Plan Net Position and Schedule of Changes in Plan Net Position – Defined Benefit Pension Plan, pages 85 and 86, display the components of the defined benefit pension plan.
- The Schedule of Administrative Expenses and Schedule of Payments to Consultants and Contractors on pages 87 and 88 show the costs of managing the System.
- The Summary of Investment Fees, Commissions, and Expenses begins on page 89 and provides the detail of investment-related expenses included in the Investment Expense line item reported in the Statement of Changes in Fiduciary Net Position.

FIDUCIARY FUNDS

- PERS' assets exceed its liabilities at the close of fiscal year 2018, with $81,098.1 million restricted for pension, IAP, OPEB, and deferred compensation benefits.
- Fiduciary net position increased by $4,053.3 million, or 5.3 percent, primarily due to increases from contributions and investment income.
- PERS' funding objective is to meet long-term benefit obligations. As of December 31, 2017, the date of the latest actuarial funding valuation, the funded ratio of the defined benefit pension plan, including side accounts, was 80.1 percent. In general, this means that for every dollar of pension benefits due, PERS has approximately $0.80 available for payment.
- Revenues (additions to fiduciary net position), which include member and employer contributions of $2,220.5 million and net income from investment activities totaling $7,238.5 million, decreased 11.4 percent to $9,463.3 million, for fiscal year 2018, compared to $10,681.0 million in fiscal year 2017. This decrease is primarily attributed to a $1,612.8 million decrease in revenues from investment activities compared to the prior year.
- Expenses (deductions from fiduciary net position) increased 8.9 percent to $5,410.0 million during the fiscal year from $4,967.9 million in fiscal year 2017, primarily due to a similar increase in benefit payments.

FIDUCIARY NET POSITION

The condensed comparative summaries of Fiduciary Net Position on page 24 demonstrate that the pension trust funds are primarily focused on investments and net position (reserves).

- The net position of the Defined Benefit Pension Plan increased approximately $2,955.8 million, or 4.5 percent, during the year ended June 30, 2018, primarily due to a $2,243.6 million, or 3.5 percent, increase in the value of investments. There was also a $1,551.4 million increase in Cash and Receivables, offset by a $789.9 million increase in pending Investment Purchases.
- The net position of the OPSRP IAP increased approximately $835.6 million, or 10.0 percent, during the year ended June 30, 2018, as the value of investments increased $787.6 million, or 9.7 percent. The remaining increase was due to the $62.2 million increase in Cash and Receivables, offset by a $14.2 million increase in pending Investment Purchases.
- The net position of the Deferred Compensation Plan increased approximately $186.0 million, or 10.5 percent, during the year ended June 30, 2018, due to a $178.9 million, or 10.5 percent increase in the value of investments. The remaining increase was due to the $7.7 million increase in Cash and Receivables.
- The net position of the RHIA increased approximately $65.1 million, or 12.7 percent, during the year ended June 30, 2018, due to a $59.4 million, or 11.9 percent, increase in the value of investments, and the $14.1 million increase in Cash and Receivables, offset by an $8.1 million increase in pending Investment Purchases.
- The net position of the RHIPA increased approximately $10.7 million, or 44.2 percent, during the year ended June 30, 2018, as the value of investments grew by $11.0 million, or 56.5 percent.

CHANGES IN FIDUCIARY NET POSITION

Revenues – Additions to Fiduciary Net Position

Additions to Fiduciary Net Position needed to finance retirement benefits are accumulated through the collection of employer and member contributions and through investment income.

- For fiscal year 2018, the financial markets moved towards more volatility resulting in a decrease in Net Investment and Other Income for all plans. See the Investment Activities section on page 28 for further discussion.
- Defined Benefit Pension Plan: Total additions for fiscal year 2018 decreased $1,045.3 million, or 12.0 percent, compared to fiscal year 2017. This decrease was primarily attributed to the $1,412.6 million, or 18.4 percent, decrease in Net Investment and Other Income.
- Individual Account Program: Total additions decreased $158.8 million ,or 10.2 percent, primarily due to the $175.9 million, or 18.5 percent, decrease in Net Investment and Other Income.
- Deferred Compensation Plan: had a $6.9 million, or 2.2 percent decrease in total revenues. Like the other plans, this decrease was primarily due to the $19.5 million, or 10.3 percent, decrease in Net Investment and Other Income, compared to fiscal year 2017.

TABLE 1
FIDUCIARY NET POSITION, PENSION
(in thousands) As of June 30

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2018	2017	2018	2017	2018	2017
Cash and Receivables	$ 6,532,384	$ 4,980,935	$ 623,735	$ 561,495	$ 79,178	$ 71,443
Investments at Fair Value	66,525,904	64,282,301	8,935,676	8,148,037	1,885,160	1,706,284
Securities Lending Collateral	1,064,760	1,447,743	108,504	185,211	41	29
Other	30,995	37,747	267	308	–	–
Total Assets	74,154,043	70,748,726	9,668,182	8,895,051	1,964,379	1,777,756
Investment Purchases	3,676,599	2,886,715	334,730	320,542	811	711
Securities Lending Payable	1,064,922	1,448,180	108,520	185,267	41	29
Other Payables	85,021	42,127	22,401	22,332	7,380	6,906
Total Liabilities	4,826,542	4,377,022	465,651	528,141	8,232	7,646
Total Net Position	$ 69,327,501	$ 66,371,704	$ 9,202,531	$ 8,366,910	$ 1,956,147	$ 1,770,110

TABLE 2
FIDUCIARY NET POSITION, OTHER POSTEMPLOYMENT BENEFITS
(in thousands) As of June 30

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2018	2017	2018	2017
Cash and Receivables	$ 52,517	$ 38,446	$ 6,243	$ 5,714
Investments at Fair Value	560,288	500,893	30,379	19,412
Securities Lending Collateral	9,047	11,397	496	445
Other	34	56	2	2
Total Assets	621,886	550,792	37,120	25,573
Investment Purchases	30,591	22,473	1,513	770
Securities Lending Payable	9,049	11,400	496	445
Other Payables	5,384	5,139	79	62
Total Liabilities	45,024	39,012	2,088	1,277
Total Net Position	$ 576,862	$ 511,780	$ 35,032	$ 24,296

- Retirement Health Insurance Account: Total additions decreased $8.5 million, or 7.9 percent. The decrease was primarily due to the $6.7 million, or 11.6 percent, decrease in Net Investment and Other Income compared to fiscal year 2017.
- Retiree Health Insurance Premium Account: Total additions increased $1.8 million, or 12.8 percent, of which $1.4 million, or 12.0 percent, of the increase over the fiscal year 2017 was due to an 11.4 percent increase in the Employer Contribution rate.

Expenses – Deductions from Fiduciary Net Position

Benefit payments, refunds of contributions to members who terminate employment, health insurance premium subsidies, deferred compensation payments, and administrative costs comprise the System's expenses.

- Pension benefit and other payments from the defined benefit pension plan were $4,694.3 million in fiscal year 2018, a $288.5 million, or 6.5 percent, increase over fiscal year 2017 expenses of $4,405.8 million, primarily due to an increase in service retirements, and annual cost of living adjustment. These increases were offset by a $2.1 million, or 13.1 percent, decrease in the Refund of Contributions and a $5.7 million, or 13.3 percent, decrease in Administrative Expense.
- IAP benefit and other payments increased by $132.6 million, or 31.1 percent, during the year, from $426.6 million in fiscal year 2017 to $559.2 million in fiscal year 2018. The number of accounts withdrawn increased 18.0 percent compared to fiscal year 2017, resulting in a $129.7 million, or 31.1 percent, increase in IAP benefit payments.
- Deferred compensation benefits and other expenses increased by $19.4 million, or 19.7 percent, from $98.4 million in fiscal year 2017 to $117.8 million in fiscal year 2018. Benefit payments were higher due to increased retirement activity.
- RHIA healthcare premium and other payments increased by $1.3 million, or 4.0 percent, from $32.5 million in fiscal year 2017 to $33.8 million in fiscal year 2018. This increase was primarily attributed to a $1.3 million, or 4.2 percent, increase in Healthcare Premium Subsidies due an increase in participants.
- RHIPA healthcare premium and other payments increased by $323.0 thousand, or 7.0 percent, from $4.6 million in fiscal year 2017 to $4.9 million in fiscal year 2018, primarily due to a 7.7 percent average increase in healthcare premiums, offset by a 1.9 percent decrease in participants.

The tables on page 26 show condensed comparative summaries of the changes in fiduciary net position and reflect the activities of the plans administered by the System.

TABLE 3
CHANGES IN FIDUCIARY NET POSITION, PENSION
(in thousands) For the Fiscal Years Ended June 30:

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2018	2017	2018	2017	2018	2017
Additions:						
Employer Contributions	$ 1,390,111	$ 1,022,201	$ –	$ –	$ –	$ –
Member Contributions	12,559	13,178	622,296	605,277	134,260	121,702
Net Investment and Other Income	6,247,472	7,660,056	772,501	948,360	169,578	189,041
Total Additions	7,650,142	8,695,435	1,394,797	1,553,637	303,838	310,743
Deductions:						
Pension Benefits	4,642,718	4,346,283	546,866	417,119	116,331	97,089
Other	51,627	59,507	12,310	9,481	1,470	1,331
Total Deductions	4,694,345	4,405,790	559,176	426,600	117,801	98,420
Net Increase	2,955,797	4,289,645	835,621	1,127,037	186,037	212,323
Net Position						
Beginning of Year	66,371,704	62,082,059	8,366,910	7,239,873	1,770,110	1,557,787
End of Year	$ 69,327,501	$ 66,371,704	$ 9,202,531	$ 8,366,910	$ 1,956,147	$ 1,770,110

TABLE 4
CHANGES IN FIDUCIARY NET POSITION, OTHER POSTEMPLOYMENT BENEFITS
(in thousands) For the Fiscal Years Ended June 30:

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2018	2017	2018	2017
Additions:				
Employer Contributions	$ 47,998	$ 49,786	$ 13,290	$ 11,864
Net Investment and Other Income	50,869	57,566	2,383	2,028
Total Additions	98,867	107,352	15,673	13,892
Deductions:				
Healthcare Premium Subsidies	32,503	31,187	4,659	4,328
Other	1,282	1,288	278	286
Total Deductions	33,785	32,475	4,937	4,614
Net Increase	65,082	74,877	10,736	9,278
Net Position				
Beginning of year	511,780	436,903	24,296	15,018
End of Year	$ 576,862	$ 511,780	$ 35,032	$ 24,296

PROPRIETARY FUND

Standard Retiree Health Insurance Account (SRHIA) uses an enterprise fund to account for the activities of PERS' health insurance program, a public entity risk pool.

NET POSITION

- The net position of the SRHIA as of June 30, 2018, was $72.6 million, a $17.3 million, or 31.4 percent increase over fiscal year 2017. This increase was primarily due an increase in Cash and Cash Equivalents, offset by a reduction of Reinsurance Reimbursements and Rebate Receivables, and a decrease in accrued expenses.

CHANGES IN NET POSITION

- SRHIA insurance premiums and other revenue for the year ended June 30, 2018, was $176.4 million, a $18.8 million, or 12.0 percent, increase from fiscal year 2017. This increase was primarily due to a 33.2 percent increase in Medicare Part D reinsurance settlement, and a 6.9 percent increase in Insurance Premium revenue as the average insurance premium for participants increased 6.7 percent.
- SRHIA healthcare and other payments for the year ended June 30, 2018, increased $9.4 million, or 6.3 percent, from $149.6 million in fiscal year 2017 to $159.0 million in fiscal year 2018 due primarily to the increases in claims expense from the rising healthcare costs.

The tables below and on the next page show the condensed summary of net position and the condensed summary of changes in revenues, expenses, and net position for SRHIA.

TABLE 5
NET POSITION, PROPRIETARY FUND
(in thousands) As of June 30

	Standard Retiree Health Insurance Account	
	2018	2017
Cash and Receivables	$ 83,336	$ 66,728
Net OPEB Asset	1	–
Securities Lending Collateral	1,187	194
Total Assets	84,524	66,922
Deferred Outflows of Resources:		
Pensions	142	202
OPEB	3	–
Total Deferred Outflows of Resources	145	202
Claims Payable	9,200	8,700
Other Payables	1,269	2,528
Securities Lending Payable	1,187	194
Net Pension Liability	369	378
Other Liabilities	47	50
Total Liabilities	12,072	11,850
Deferred Inflows of Resources:		
Pensions	3	4
OPEB	1	–
Total Deferred Inflows of Resources	4	4
Total Net Position	$ 72,593	$ 55,270

TABLE 6
REVENUES, EXPENSES, AND CHANGES IN NET POSITION, PROPRIETARY FUND
(in thousands) For the Fiscal Years Ended June 30:

	Standard Retiree Health Insurance Account	
	2018	2017
Revenues:		
Insurance Premiums	$ 137,827	$ 128,963
Reinsurance Reimbursements	37,585	28,211
Investment Income	971	379
Total Revenues	176,383	157,553
Expenses:		
Claims	142,437	133,601
Change in Estimated Liabilities	500	(500)
Administrative and Other Expense	16,109	16,531
Transfers to Other State Funds	–	21
Total Expenses	159,046	149,653
Net Increase	17,337	7,900
Net Position		
Beginning of Year	55,270	47,370
Cumulative Change in Accounting Principle	(14)	–
End of Year	$ 72,593	$ 55,270

NET PENSION LIABILITY

The Employers' Net Pension Liability (NPL) as of June 30, 2018, was $15,148.6 million, compared to a Net Pension Liability of $13,480.0 million as of June 30, 2017. The increase in Employers' Net Pension Liability was primarily due to a $4,624.4 million, or 5.8 percent, increase in Total Pension Liability, offset by a lesser increase in Fiduciary Net Position of $2,955.8 million, or 4.5 percent.

NET OPEB LIABILITY/(ASSET)

The Employers' Net OPEB Asset for RHIA as of June 30, 2018 was $111.6 million, compared to the Net OPEB Asset of $41.8 million as of June 30, 2017. The increase in Employers' Net OPEB Asset was primarily due to a 12.7 percent increase in Fiduciary Net Position as net investment income exceeded benefit payments.

The Employer's Net OPEB Liability for RHIPA as of June 30, 2018 was $35.3 million, compared to the Net OPEB Liability of $46.6 million as of June 30, 2017. The decrease in Employers' Net OPEB Liability was primarily due to a 44.0 percent increase in Fiduciary Net Position as net investment income exceeded benefit payments.

INVESTMENT ACTIVITIES

During fiscal year 2018, investments increased a modest 4.4 percent over the prior fiscal year as markets moved towards more volatility. Holdings in all asset classes experienced positive investment returns, except Real Estate and Public Equity. The Alternative Equity increased substantially by $1,858.6 million, or 44.9 percent, followed by the Opportunity Portfolio, which increased $178.3 million, or 11.2 percent. The other portfolios increased as follows: Private Equity increased $1,193.4 million, or 7.9 percent; Debt Securities increased

$460.6 million, or 3.1 percent; Real Estate decreased $391.8 million, or 4.5 percent; and Public Equity decreased $18.6 million, or 0.1 percent. One-year returns on asset classes and comparative benchmarks are presented in the table on page 31.

PLAN MEMBERSHIP

The table below reflects the Defined Benefit Pension Plan membership as of the end of the fiscal years.

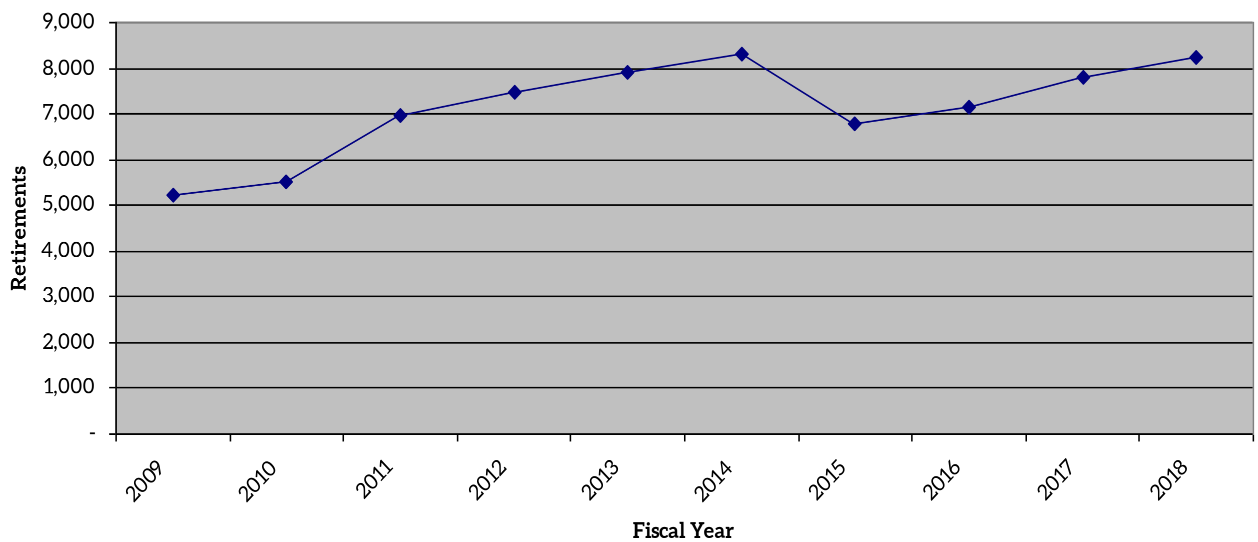
TABLE 7
CHANGES IN PLAN MEMBERSHIP
As of June 30:

	2018	2017	Percentage Change
Retirees and beneficiaries benefits:			
General	133,942	129,578	3.4 %
Police and Fire	11,921	11,437	4.2
Total	145,863	141,015	3.4
Current and terminated employees:			
Vested:			
General	202,912	200,157	1.4
Police and Fire	17,268	16,816	2.7
Nonvested:			
General	1,728	1,850	(6.6)
Police and Fire	82	191	(57.1)
Total	221,990	219,014	1.4 %

SERVICE RETIREMENTS

Service retirements increased 5.8 percent in fiscal year 2018, primarily due to an increase in inactive members receiving benefits. Service retirements in fiscal year 2018 were 8,251 compared to 7,798 in fiscal year 2017.

TABLE 8
SERVICE RETIREMENTS
By Fiscal Year



CURRENTLY KNOWN FACTS, CONDITIONS, OR DECISIONS

The following are currently known facts, conditions, or decisions that are expected to have a significant effect on the System's financial position or results of operations:

- During the February 2018 Legislative session, Senate Bill 1566 was approved. This bill established the Employer Incentive Fund (EIF) Program which will allow eligible employers to receive matching funds if they apply and make a qualifying deposit into a side account. The System is working to establish an application process for qualifying deposits and employers are eager to participate. Currently identified revenue for the EIF Program is a portion of the increase in the repatriation of corporate tax revenue that may be available in 2021. For school districts participating in the School District Side Account Program, revenue may be available from five different streams over the next nine years. These revenue streams include a portion of the increase in the repatriation of corporate tax revenue, a portion of debt collection, capital gains and estate taxes, and interest from unclaimed property. The System is implementing these programs and will refine as needed.

CONTACTING THE SYSTEM'S FINANCIAL MANAGEMENT

This financial report is designed to provide plan participants, employers, citizens, taxpayers, and others with a general overview of the System's finances and to demonstrate the Board's oversight of the System. If you have questions about this report or need additional financial information, please contact the Financial and Administrative Services Division Administrator at P.O. Box 23700, Tigard, Oregon 97281-3700.

Table 9
Investment Results*
Periods Ended June 30,

	2018	2017
Total Portfolio, Excluding Variable Account	9.40 %	11.92 %
Policy Benchmark[1]	9.19	13.02
Variable Account	11.53	19.52
Benchmark: MSCI All Country World Investable Market Index Net	11.14	19.01
Domestic Stocks	15.01	19.61
Benchmark: Russell 3000 Index	14.78	18.51
International Stocks	8.88	21.11
Benchmark: MSCI All Country World ex-US Investable Market Index Net	7.75	20.43
Fixed Income Segment	0.28	1.48
Benchmark: Custom Index[2]	0.24	0.41
Real Estate[3]	8.65	6.94
Benchmark: Oregon Custom Real Estate Benchmark[3]	7.11	7.36
Private Equity[4]	17.75	12.61
Benchmark: Russell 3000 Index + 300 bps	17.19	21.56
Alternative Equity	4.45	11.03
Benchmark: Consumer Price Index + 400 bps	6.98	5.69
Opportunity Portfolio	7.28	6.18
Benchmark: Russell 3000 Index	8.00	18.51

The rates of return reported in the Investment Section are based on a time-weighted rate of return methodology based upon market values, unless disclosed otherwise in the footnotes to the associated tables.

* Investment Results are based upon OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of individual holdings.

[1] From October 1, 2013 to March 31, 2016, the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 23.5% Oregon Custom FI Benchmark, 12.5% NCREIF Property Index quarter lag, 41.5% MSCI ACWI and 2.5% CPI+4%.
From April 1, 2016 to June 30, 2016 the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 23.5% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 41.5% MSCI AC World Index and 2.5% CPI+4%.
From July 1, 2016 to March 1, 2018 the policy benchmark is 20% Russell 3000+300 Bps quarter lag, 22.5% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 40% MSCI ACWI IMI Net and 5% CPI+4%.
From April 1, 2018 to present the policy benchmark is 19% Russell 3000+300 Bps quarter lag, 22% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 39% MSCI ACWI IMI Net and 7.5% CPI+4%.

[2] From March 1, 2011 to December 31, 2013, index was 60% Barclays Capital (BC) U.S. Universal Index, 20% S&P/LSTA Leveraged Loan Index, 10% JP Morgan Emerging Market Bond Index Global Index, and 10% Bank of America Merrill Lynch (BofA ML) High Yield Master II Index.
From January 1, 2014 to February 29, 2016, index was 40% BC U.S. Aggregate Bond, 40% BC U.S. 1-3 Year Government/Credit Bond Index, 15% S&P LSTA Leveraged Loan Index, and 5% BofA ML High Yield Master II Index.
From March 1, 2016 to present, index is 46% Barclays Aggregate Bond, 37% Barclays Treasury, 13% S&P LSTA and 4% BofA ML High Yield Master II.

[3] Through March 31, 2016, the Oregon Custom Real Estate Benchmark was made up of the NCREIF Property quarter lag Index.
From April 1, 2016, the benchmark, is made up of the NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE) quarter lag Net of Fees.
From July 1, 2017, the monthly return is calculated as the geometrically linked monthly-portion of the quarterly return. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

[4] Through December 31, 2016, the Private Equity return combines the estimated return from the most recent quarter with a revision component that trues up the past two quarters' reported returns with the past two quarters' actual returns.

[5] Until June 30, 2017 the index is Russell 3000+300 Bps, quarter lag. From July 1, 2017, the monthly return is calculated as the geometrically linked monthly-portion of the quarterly return. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

Basic Financial Statements

Statement of Fiduciary Net Position
Pension and Other Postemployment Plans
As of June 30, 2018, with Comparative Totals as of June 30, 2017

			Defined Benefit OPEB Plans	
	Defined Benefit Pension Plan	Oregon Public Service Retirement Plan Individual Account Program	Retirement Health Insurance Account	Retiree Health Insurance Premium Account
Assets:				
Cash and Cash Equivalents	$ 3,811,491,639	$ 389,195,186	$ 32,097,702	$ 2,781,911
Receivables:				
Employer	66,100,727	–	1,597,708	2,376,057
Plan Member	–	8,890,096	–	–
Interest and Dividends	123,261,020	12,960,970	1,046,661	56,752
Member Loans	–	–	–	–
Investment Sales and Other Receivables	2,036,800,549	204,289,391	17,060,325	995,644
Transitional Liability	493,252,928	–	–	–
Total Receivables	2,719,415,224	226,140,457	19,704,694	3,428,453
Due from Other Funds	1,477,606	8,399,703	714,543	32,452
Investments:				
Debt Securities	12,528,512,115	2,512,404,231	106,384,833	5,768,415
Public Equity	24,918,456,439	3,461,500,679	206,981,940	11,223,008
Real Estate	7,496,276,176	763,516,818	63,654,014	3,451,458
Private Equity	14,593,660,670	1,486,405,397	123,920,873	6,719,257
Alternative Equity	5,399,081,290	549,911,619	45,845,856	2,485,861
Opportunity Portfolio	1,589,916,854	161,937,505	13,500,649	732,034
Total Investments	66,525,903,544	8,935,676,249	560,288,165	30,380,033
Securities Lending Collateral	1,064,760,119	108,503,845	9,047,496	495,584
Prepaid Expenses	3,990,934	–	33,889	1,838
Capital Assets at Cost, Net	27,004,310	267,274	–	–
Total Assets	**74,154,043,376**	**9,668,182,714**	**621,886,489**	**37,120,271**
Liabilities:				
Investment Purchases and Accrued Expenses	3,676,599,264	334,729,486	30,591,019	1,513,886
Deposits and Other Liabilities	75,874,507	21,201,006	5,350,694	47,143
Due Other Funds	9,146,698	1,200,444	34,054	31,460
Securities Lending Collateral Due Borrowers	1,064,922,462	108,520,380	9,048,874	495,659
Total Liabilities	**4,826,542,931**	**465,651,316**	**45,024,641**	**2,088,148**
Net Position Restricted for Pension and Other Postemployment Benefits	**$ 69,327,500,445**	**$ 9,202,531,398**	**$ 576,861,848**	**$ 35,032,123**

The accompanying notes are an integral part of the financial statements.

Deferred Compensation Plan	2018	2017
$ 66,346,623	$ 4,301,913,061	$ 3,208,582,928
–	70,074,492	68,168,344
–	8,890,096	13,815,187
492,153	137,817,556	142,607,803
12,332,389	12,332,389	11,918,643
6,486	2,259,152,395	1,664,615,703
–	493,252,928	537,321,121
12,831,028	2,981,519,856	2,438,446,801
–	10,624,304	11,004,090
276,088,203	15,429,157,797	14,968,539,870
1,609,071,848	30,207,233,914	30,225,870,153
–	8,326,898,466	8,718,684,190
–	16,210,706,197	15,017,344,594
–	5,997,324,626	4,138,735,188
–	1,766,087,042	1,587,753,762
1,885,160,051	77,937,408,042	74,656,927,757
40,885	1,182,847,929	1,644,824,059
–	4,026,661	8,416,274
–	27,271,584	29,696,390
1,964,378,587	**86,445,611,437**	**81,997,898,299**
811,344	4,044,244,999	3,231,211,182
7,252,605	109,725,955	65,624,013
127,418	10,540,074	10,942,750
40,885	1,183,028,260	1,645,321,513
8,232,252	**5,347,539,288**	**4,953,099,458**
$ 1,956,146,335	**$ 81,098,072,149**	**$ 77,044,798,841**

Statement of Changes in Fiduciary Net Position
Pension and Other Postemployment Plans
For the Fiscal Year Ended June 30, 2018, with Comparative Totals for the Fiscal Year Ended June 30, 2017

			Defined Benefit OPEB Plans	
	Defined Benefit Pension Plan	**Oregon Public Service Retirement Plan Individual Account Program**	**Retirement Health Insurance Account**	**Retiree Health Insurance Premium Account**
Additions:				
Contributions:				
Employer	$ 1,390,111,534	$ –	$ 47,997,918	$ 13,290,145
Plan Member	12,558,631	622,296,460	–	–
Total Contributions	1,402,670,165	622,296,460	47,997,918	13,290,145
Investment Income:				
Net Appreciation/(Depreciation) in Fair Value of Investments	5,280,807,747	654,802,275	42,920,237	2,009,600
Interest, Dividends and Other Investment Income	1,557,254,664	184,927,794	12,886,150	617,681
Total Investment Income	6,838,062,411	839,730,069	55,806,387	2,627,281
Less Investment Expense	(602,045,695)	(68,790,804)	(5,011,832)	(247,591)
Net Investment Income	6,236,016,716	770,939,265	50,794,555	2,379,690
Securities Lending Income:				
Securities Lending Income	26,844,240	3,056,187	220,663	10,413
Less Securities Lending Expense	(17,745,170)	(2,014,813)	(146,006)	(6,919)
Net Securities Lending Income	9,099,070	1,041,374	74,657	3,494
Other Income	2,356,704	520,475	–	–
Total Additions	7,650,142,655	1,394,797,574	98,867,130	15,673,329
Deductions:				
Benefits	4,637,868,037	546,866,343	–	–
Death Benefits	4,849,807	–	–	–
Refunds of Contributions	13,876,294	–	–	–
Administrative Expense	37,751,319	12,309,768	1,281,744	277,596
Healthcare Premium Subsidies	–	–	32,503,140	4,659,536
Total Deductions	4,694,345,457	559,176,111	33,784,884	4,937,132
Net Increase	**2,955,797,198**	**835,621,463**	**65,082,246**	**10,736,197**
Net Position Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	66,371,703,247	8,366,909,935	511,779,602	24,295,926
End of Year	**$ 69,327,500,445**	**$ 9,202,531,398**	**$ 576,861,848**	**$ 35,032,123**

The accompanying notes are an integral part of the financial statements.

Deferred Compensation Plan	2018	2017
$ –	$ 1,451,399,597	$ 1,083,850,526
134,259,568	769,114,659	740,157,232
134,259,568	2,220,514,256	1,824,007,758
160,702,584	6,141,242,443	7,851,696,985
11,353,458	1,767,039,747	1,691,876,626
172,056,042	7,908,282,190	9,543,573,611
(3,915,634)	(680,011,556)	(704,211,537)
168,140,408	7,228,270,634	8,839,362,074
70	30,131,573	22,427,576
(70)	(19,912,978)	(10,511,222)
–	10,218,595	11,916,354
1,437,361	4,314,540	5,773,197
303,837,337	9,463,318,025	10,681,059,383
116,331,317	5,301,065,697	4,855,806,766
–	4,849,807	4,684,598
–	13,876,294	15,961,744
1,469,816	53,090,243	55,932,099
–	37,162,676	35,514,746
117,801,133	5,410,044,717	4,967,899,953
186,036,204	**4,053,273,308**	**5,713,159,430**
1,770,110,131	77,044,798,841	71,331,639,411
$ **1,956,146,335**	$ **81,098,072,149**	$ **77,044,798,841**

Statement of Net Position
Proprietary Fund
As of June 30, 2018, with Comparative Totals as of June 30, 2017

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2018	2017
Assets:		
Current Assets		
Cash and Cash Equivalents	$ 63,379,394	$ 41,950,357
Reinsurance Reimbursements and Rebate Receivables	19,956,310	24,777,883
Securities Lending Collateral	1,186,752	193,718
Total Current Assets	**84,522,456**	**66,921,958**
Noncurrent Assets		
Net OPEB Asset	1,289	–
Total Noncurrent Assets	**1,289**	–
Total Assets	**84,523,745**	**66,921,958**
Deferred Outflows of Resources		
Pensions	142,149	202,380
OPEB	3,200	–
Total Deferred Outflows of Resources	**145,349**	**202,380**
Liabilities:		
Current Liabilities		
Accrued Expenses	1,167,810	2,450,008
Compensated Absences	15,882	15,539
Due to Other Funds	84,230	61,340
Estimated Insurance Claims Due	9,200,000	8,700,000
Pension Obligation Bonds	1,400	1,200
Securities Lending Collateral Due Borrowers	1,186,752	193,718
Total Current Liabilities	**11,656,074**	**11,421,805**
Noncurrent Liabilities		
Compensated Absences	8,552	8,367
Pension Obligation Bonds	21,966	23,572
Other Liabilities	16,656	18,230
Net Pension Liability	368,837	378,415
Total Noncurrent Liabilities	**416,011**	**428,584**
Total Liabilities	**12,072,085**	**11,850,389**
Deferred Inflows of Resources		
Pensions	3,082	3,596
OPEB	909	–
Total Deferred Inflows of Resources	**3,991**	**3,596**
Net Position:		
Restricted for:		
OPEB	3,580	–
Unrestricted	72,589,438	55,270,353
Total Net Position	**$ 72,593,018**	**$ 55,270,353**

The accompanying notes are an integral part of the financial statements.

Statement of Revenues, Expenses, and Changes in Net Position
Proprietary Fund
For the Fiscal Year Ended June 30, 2018, with Comparative Totals for the Fiscal Year Ended June 30, 2017

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2018	**2017**
Operating Revenues:		
Insurance Premium Revenue	$ 137,827,233	$ 128,962,823
Reinsurance Reimbursements	37,585,003	28,210,514
Total Operating Revenues	175,412,236	157,173,337
Operating Expenses:		
Claims Expense	142,436,948	133,600,670
Increase/(Decrease) in Estimated Liabilities	500,000	(500,000)
Administrative Expense	16,109,792	16,531,345
Total Operating Expenses	159,046,740	149,632,015
Operating Income	**16,365,496**	**7,541,322**
Non-Operating Revenues:		
Interest, Dividends and Other Investment Income	971,245	378,936
Transfers to Other State Funds	–	(20,537)
Securities Lending Income	5,977	953
Less Securities Lending Expense	(5,977)	(953)
Net Securities Lending Income	–	–
Total Non-Operating Revenues	971,245	358,399
Change in Net Position	17,336,741	7,899,721
Total Net Position		
Beginning of Year	55,270,353	47,370,632
Cumulative Effect of Change in Accounting Principle	(14,076)	–
Beginning of the Year, Adjusted	55,256,277	47,370,632
End of Year	**$ 72,593,018**	**$ 55,270,353**

The accompanying notes are an integral part of the financial statements.

Statement of Cash Flows

Proprietary Fund

For the Fiscal Year Ended June 30, 2018, with Comparative Totals for the Fiscal Year Ended June 30, 2017

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2018	2017
Cash Flows from Operating Activities:		
Insurance Premiums and Reinsurance Reimbursements	$ 180,233,809	$ 171,798,826
Claims Paid	(142,436,948)	(133,600,670)
Other Payments	(17,339,069)	(20,823,979)
Net Cash Provided by Operating Activities	**20,457,792**	**17,374,177**
Cash Flows from Non Capital Related Financing Activities:		
Transfers to Other State Funds	–	(20,537)
Cash Flows from Investing Activities:		
Interest and Dividends Received	971,245	378,936
Net Increase in Cash and Cash Equivalents	21,429,037	17,732,576
Cash and Cash Equivalents Beginning of Year	41,950,357	24,217,781
Cash and Cash Equivalents End of Year	$ 63,379,394	$ 41,950,357
Reconciliation of Operating Income to Net Cash Provided by Operating Activities		
Operating Income	$ 16,365,496	$ 7,541,322
Adjustments to reconcile operating income to net cash provided by operating activities:		
Effect of Cumulative Change in Accounting Principle	(14,076)	–
Changes in assets, deferred outflows of resources, liabilities, and deferred inflows of resources:		
Reinsurance Reimbursements and Rebate Receivables	4,821,573	13,408,343
Due from Other Funds	–	1,217,146
Net OPEB Asset	(1,289)	–
Deferred Outflows of Resources - Pension	60,231	(173,086)
Deferred Outflows of Resources - OPEB	(3,200)	–
Accrued Expenses	(1,282,198)	(4,359,364)
Compensated Absences	528	–
Due to Other Funds	22,890	(22,955)
Estimated Insurance Claims Due	500,000	(500,000)
Pension Obligation Bonds	(1,406)	–
Other Liabilities	(1,574)	22,050
Net Pension Liability	(9,578)	264,790
Deferred Inflows of Resources - Pension	(514)	(24,069)
Deferred Inflows of Resources - OPEB	909	–
Net Cash Provided by Operating Activities	$ **20,457,792**	$ **17,374,177**

The accompanying notes are an integral part of the financial statements.

Note 1 - Summary of Significant Accounting Policies

A. Reporting Entity

The Oregon State Treasurer has statutory responsibility for custody and investment of the Oregon Public Employees Retirement System (PERS or the System) assets. As a result of this fiduciary responsibility, PERS is included as part of the primary government in the *State of Oregon Comprehensive Annual Financial Report*.

B. Basis of Presentation

The accompanying financial statements are prepared on the basis of a fiscal year ended June 30, 2018, in accordance with generally accepted accounting principles in the United States of America as set forth in Governmental Accounting Standards Board (GASB) pronouncements that apply to governmental accounting for fiduciary funds and enterprise funds. Fiduciary funds are used to account for assets held by a governmental unit in a trustee capacity (trust funds). Proprietary funds may be used to report any activity for which a fee is charged to external users for goods or services.

PERS' pension, other postemployment benefits, and deferred compensation activities are accounted for in five pension and other postemployment benefit trust funds:

- Defined Benefit Pension Plan, a cost-sharing multiple-employer plan, which includes the Variable Annuity Account
- Oregon Public Service Retirement Plan – Individual Account Program, a defined contribution plan
- Retirement Health Insurance Account, a cost-sharing multiple-employer plan
- Retiree Health Insurance Premium Account, a single-employer plan
- Deferred Compensation Fund (Oregon Savings Growth Plan).

PERS' public entity risk pool activity is accounted for in a single proprietary enterprise fund:

- Standard Retiree Health Insurance Account

C. Basis of Accounting

The accrual basis of accounting is used for all funds. Revenues are recognized when earned. Contributions are recognized when due, pursuant to legal (or statutory) requirements. Benefits and withdrawals are recognized when they are currently due and payable in accordance with the terms of the plans.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues are insurance premiums and reinsurance reimbursements, and operating expenses include claims and administrative expenses. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses. Deferred outflows of resources related to pensions and OPEB resulting from contributions made subsequent to the measurement date will be recognized as a reduction of the net pension liability and net OPEB liability, or an increase in the net OPEB asset in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions and OPEB will be recognized in pension and OPEB expense for approximately each of the subsequent four years.

D. Investments

Oregon Revised Statute (ORS) 293.706 established the Oregon Investment Council (OIC), which consists of five voting members. Four members of the council, who are qualified by training and experience in the field of investment or finance, are appointed by the Governor subject to state Senate confirmation. The State Treasurer serves as the council's remaining voting member. In addition, the Executive Director of the System serves as a non-voting OIC member.

ORS 293.701 defines the investment funds over which OIC has responsibility. Included are the Oregon Public Employees Retirement Fund (OPERF), which is comprised of the Defined Benefit Pension Plan, the Individual Account Program, and the Other Postemployment Benefit plans, and the Deferred Compensation Fund. OIC establishes policies for the investment and reinvestment of moneys in the investment funds as well as the acquisition, retention, management, and disposition of investments in the investment funds. OIC is also responsible for providing an examination of the effectiveness of the investment program.

OIC ensures moneys in the investment funds are invested and reinvested to achieve the investment objective of making the moneys as productive as possible. Furthermore, the investments of those funds are managed as a prudent investor would do under the prevailing circumstances and in light of the purposes, terms, distribution requirements, and laws governing each investment fund. This standard requires the exercise of reasonable care, skill, and caution and is applied to investments not in isolation, but in the context of each fund's portfolio as part of an overall investment strategy. The strategy should incorporate risk and return objectives reasonably suitable to the particular investment fund.

When implementing investment decisions, OIC has a duty to diversify the investments of the investment funds unless, under the circumstances, it is not prudent to do so. In addition, OIC must act with prudence when selecting agents and delegating authority.

Investments are recognized at fair value, the amount that could be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Investments that do not have a readily determinable fair value are valued using the net asset value (NAV) per share. Such values generally represent PERS' ownership interest in partnership capital.

The fair value of publicly traded debt and equity securities in active markets is determined by the custodian's pricing agent using nationally recognized pricing services. The custodian's pricing agent values equity securities traded on a national or international exchange at the last reported sales price and generally values debt securities by using evaluated bid prices. For securities that do not have an active market, such as private placements or commingled investment vehicles, a market price is calculated by either the custodian's pricing agent or the investment manager. For example, a similar benchmark security may be used to derive the fair value. The benchmark will typically have a coupon rate and maturity date comparable to the debt security being valued, and its market risk will be similar, considering current market conditions. The fair value of real estate investment trust (REIT) securities is determined by the custodian's pricing agent using recognized pricing services.

Investments in real estate, other than publicly traded REITS, for which observable market prices in active markets do not exist, are reported at fair value as of June 30, 2018, as determined by management based on valuation information provided in good faith by the general partner. Direct investments in real estate are appraised every two to three years, and between appraisals, investment managers adjust values to reflect current and projected operating performance and financial transactions. In the absence of observable market prices, general partners determine the fair value of real estate partnerships using valuation methods considered most appropriate. A variety of factors are considered, including the nature of the investment, local market conditions, trading values on public exchanges for comparable investments, current and projected operating performance, and financing transactions subsequent to the acquisition of the investment.

Investments in private equities are recorded at fair value as of June 30, 2018, as determined by management based on valuation information provided by the general partner. Investments in private equities representing publicly traded securities are stated at quoted market price. Where observable market inputs are not available, valuation models are applied. The general partner determines fair value based on the best information available and by reference to information including, but not limited to, the following: projected sales, net earnings, earnings before interest, taxes, depreciation and amortization, balance sheets, public and private transactions, valuations for publicly traded comparable companies, and/or other measures, and consideration of any other pertinent information including the types of securities held and the general partner's own assumptions regarding the investment. The methods used to determine the fair value of these investments typically include: (1) the market approach (whereby fair value is derived by reference to observable valuation measures for comparable companies or assets) and (2) the income approach (e.g., the discounted cash flow method).

Investments in the opportunity and alternatives portfolios are recorded at fair value as of June 30, 2018 by the respective general partner or account manager. Investments in the opportunity and alternatives portfolios representing publicly traded securities are stated at quoted market price. Where observable market inputs are not available, valuation models are applied. The general partner or account manager determines fair value based on the best information available and by reference to information including, but not limited to, the following: projected sales, net earnings, earnings before interest, taxes, depreciation, and amortization, balance sheets, public and private transactions, valuations for publicly traded comparable companies, and/or other measures, and consideration of any other pertinent information including the types of securities held and the general partner's own assumptions regarding the investment. The methods used to determine the fair value of these investments typically include: (1) the market approach (whereby fair value is derived by reference to observable valuation measures for comparable companies or assets); (2) the income approach (e.g. the discounted cash flow method).

Due to the inherent uncertainty and the degree of judgment involved in determining private equity, opportunity, real estate, and alternatives portfolio investment valuations, the fair values reflected in the accompanying financial statements may differ significantly from values that would have been used had a readily determinable market value for the investments existed and the difference could be material. In addition, these investments are generally considered to be illiquid long-term investments, and the recorded fair values may materially differ from the amounts that eventually may be realized from the sale or other disposition of these investments.

OIC has approved the following asset classes for the OPERF: Short-Term Investments, Fixed Income, Real Estate, Public and Private Equities, and Alternative Investments. In addition, OPERF invests in the Opportunity Portfolio, which may be populated with investment approaches across a wide range of investment opportunities with no limitation as to asset classes or strategies. OIC must approve, in advance, the purchase of investments in a new asset class not described above.

Table 1 below displays the OIC approved asset allocation policy See the Long-Term Expected Rate of Return table on page 72.

TABLE 1

Asset Class	Target Allocation
Cash	0.0%
Debt Securities	20.0%
Public Equity	37.5%
Private Equity	17.5%
Real Estate	12.5%
Alternative Equity	12.5%
Opportunity Portfolio	0.0%
Total	100.0%

See Geometric Return Table 31 on page 72

E. Earnings Crediting

By law earnings are credited to member accounts on a calendar-year basis. Members in Tier One are currently guaranteed to receive at least the assumed earnings rate used in the most recent actuarial valuation. Members participating in the Variable Annuity Account, IAP members, and Tier Two members are credited actual earnings or losses, less deductions allowed by law.

F. Administrative Costs

The System's administrative expenses are funded from investment earnings and administrative fees collected from members and are allocated to all plans and programs administered by the System. If investment earnings and fees are insufficient for such purpose, the remaining expenses are paid from employer contributions.

G. Use of Estimates in the Preparation of Financial Statements

The preparation of the System's financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain financial statement amounts and disclosures. Actual results could differ from those estimates.

Certain reclassifications have been made to the comparative totals as of and for the fiscal year ended June 30, 2017, to conform to the presentation as of and for the fiscal year ended June 30, 2018.

H. Comparative Totals

The basic financial statements include certain prior year summarized comparative information in total but not at the level of detail required for a presentation in conformity with the accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System financial statements as of and for the fiscal year ended June 30, 2017, from which the summarized information was derived.

I. New Pronouncement

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Issued June 2015, this statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans*, for OPEB. GASB Statement No. 75 establishes new accounting and financial reporting requirements for employers who sponsor OPEB plans. This statement provides guidance for accounting for net OPEB liabilities, including definition of balances to be included in deferred outflows and deferred inflows of resources. The new pronouncement affects SRHIA only, and was adopted in the current year. Accordingly, the Beginning of Year Total Net Position for 2018 was restated to reflect the change in accounting principle.

Note 2 - Description of Plan

A. Organization

PERS administers a cost-sharing, multiple-employer defined benefit pension plan for units of state government, political subdivisions, community colleges, and school districts, containing multiple actuarial pools. Plan assets may be used to pay the benefits of the employees of any employer that provides pensions through the Plan. Participation by state government units, school districts, and community colleges is mandatory. Participation by most political subdivisions is optional but irrevocable if elected. As of June 30, 2018, there were 904 participating employers.

PERS is administered in accordance with Oregon Revised Statutes (ORS) Chapter 238, Chapter 238A, and Internal Revenue Code Section 401(a). The Oregon Legislature has delegated authority to the Public Employees Retirement Board (Board) to administer and manage the System. All members of the Board are appointed by the Governor and confirmed by the Senate. The Governor designates the chairperson. One member must be a public employer manager or a local elected official, one

TABLE 2

Plan Membership as of June 30, 2018	Employers	Defined Benefit Plan Tier 1	Tier 2	OPSRP	Total	Postemployment Healthcare RHIA	RHIPA
Employers							
State Agencies	109						
School Districts	296						
Political Subdivisions	482						
Community Colleges	17						
Total Employers	**904**						
Inactive Members - General Service							
Retirees and beneficiaries currently receiving benefits		114,524	12,687	4,201	131,412	43,423	1,102
Alternate Payees currently receiving benefits		2,443	80	7	2,530	n/a	n/a
Inactive Members - General Service Receiving Benefits		***116,967***	***12,767***	***4,208***	***133,942***	***43,423***	***1,102***
Inactive members eligible for, but not yet receiving benefits		8,476	6,635	4,829	19,940	14,519	n/a
Inactive members eligible for refund value of account only		3,519	7,992	n/a[1]	11,511	n/a	n/a
Inactive members not eligible for refund or retirement		0	0	12,685	12,685	n/a	n/a
Inactive Members - General Service Not Receiving Benefits		***11,995***	***14,627***	***17,514***	***44,136***	***14,519***	–
Total Inactive Members - General Service		**128,962**	**27,394**	**21,722**	**178,078**	**57,942**	**1,102**
Inactive Members - Police and Fire							
Retirees and beneficiaries currently receiving benefits		10,014	1,130	244	11,388	2,610	126
Alternate Payees currently receiving benefits		520	11	2	533	n/a	n/a
Inactive Members - Fire and Police Receiving Benefits		***10,534***	***1,141***	***246***	***11,921***	***2,610***	***126***
Inactive members eligible for, but not yet receiving benefits		306	267	184	757	696	n/a
Inactive members eligible for refund value of account only		112	367	n/a[1]	479	n/a	n/a
Inactive members not eligible for refund or retirement		0	0	621	621	n/a	n/a
Inactive Members - Fire and Police Not Receiving Benefits		***418***	***634***	***805***	***1,857***	***696***	–
Total Inactive Members - Fire and Police		**10,952**	**1,775**	**1,051**	**13,778**	**3,306**	**126**
Active Members - General Service							
State Agencies		5,478	7,591	29,316	42,385	12,961	12,813
School Districts		8,373	14,297	48,485	71,155	22,541	n/a
Political Subdivisions		4,733	7,616	26,631	38,980	12,282	n/a
Community Colleges		833	1,473	5,678	7,984	2,292	n/a
Total Active Members - General Service		**19,417**	**30,977**	**110,110**	**160,504**	**50,076**	**12,813**
Active Members - Police and Fire							
State Agencies		703	1,630	3,602	5,935	2,331	2,277
School Districts		15	26	42	83	38	n/a
Political Subdivisions		1,255	2,497	5,700	9,452	3,747	n/a
Community Colleges		2	6	15	23	8	n/a
Total Active Members - Fire and Police		**1,975**	**4,159**	**9,359**	**15,493**	**6,124**	**2,277**
Grand Total Members		**161,306**	**64,305**	**142,242**	**367,853**	**117,448**	**16,318**

[1] Defined benefit only. No individual accounts are maintained.

member must be a union-represented public employee or retiree, and three members must have experience in business management, pension management, or investing.

B. Plan Membership

Employer, retiree, active and inactive member data as of June 30, 2018, is shown in Table 2 above.

The 1995 Legislature enacted Chapter 654, Section 3, Oregon Laws 1995, which has been codified into ORS 238.435. This legislation created a second tier of benefits for those who established membership on or after January 1, 1996. The second tier does not have the Tier One assumed earnings rate guarantee and has a higher normal retirement age of 60, compared to age 58 for Tier One.

As of June 30, 2018, there were 21,392 active plan members, 127,501 retired plan members or their beneficiaries currently receiving benefits, 12,413 inactive plan members entitled to but not yet receiving benefits, for a total of 161,306 Tier One members.

For Tier Two members, as of June 30, 2018, there were 35,136 active plan members, 13,908 retired plan members or their beneficiaries currently receiving benefits, 15,261 inactive plan members entitled to but not yet receiving benefits, for a total of 64,305.

The 2003 Legislature enacted HB 2020, codified as ORS 238A, which created the Oregon Public Service Retirement Plan (OPSRP). OPSRP consists of the Pension Program and the Individual Account Program. Membership includes public employees hired on or after August 29, 2003.

As of June 30, 2018, there were 119,469 active plan members, 4,454 retired plan members or their beneficiaries currently receiving benefits, 5,013 inactive plan members entitled to but not yet receiving benefits, and 13,306 inactive plan members not eligible for refund or retirement, for a total of 142,242 OPSRP Pension Program members.

Beginning January 1, 2004, PERS active Tier One and Tier Two members became members of the Individual Account Program (IAP) of OPSRP. PERS members retain their existing Regular or Variable accounts, but member contributions are now deposited into the member's IAP account. Accounts are credited with earnings and losses net of administrative expenses. OPSRP is part of PERS and is administered by the Board. The PERS Board is directed to adopt any rules necessary to administer OPSRP, and such rules are to be considered part of the plan for IRS purposes.

C. Plan Benefits

a. PERS Pension (Chapter 238 — Tier One/Tier Two)

1. Pension Benefits

The PERS retirement allowance is payable monthly for life. Member may select from 13 retirement benefit options that are actuarially equivalent to the base benefit.

These options include survivorship benefits and lump-sum refunds. The basic benefit is based on years of service and final average salary. A percentage (2.0 percent for Police and Fire employees, 1.67 percent for General Service employees) is multiplied by the number of years of service and the final average salary. Benefits may also be calculated under a formula plus annuity (for members who were contributing before August 21, 1981) or a money match computation if a greater benefit results. Monthly payments must be a minimum of $200 per month or the member will receive a lump-sum payment of the actuarial equivalence of benefits to which he or she is entitled.

Police and Fire members may purchase increased benefits that are payable between the date of retirement and age 65.

A member is considered vested and will be eligible at minimum retirement age for a service retirement allowance if he or she has had a contribution in each of five calendar years or has reached at least 50 years of age before ceasing employment with a participating employer (age 45 for Police and Fire members). General Service employees may retire after reaching age 55. Police and Fire members are eligible after reaching age 50. Tier One General Service employee benefits are reduced if retirement occurs prior to age 58 with fewer than 30 years of service. Police and Fire member benefits are reduced if retirement occurs prior to age 55 with fewer than 25 years of service. Tier Two members are eligible for full benefits at age 60. The plans are closed to new members hired on or after August 29, 2003.

A judge member who has made contributions to PERS during each of five calendar years shall receive a retirement allowance, payable monthly, for life. Before reaching age 60, judge members must choose the calculation formula under which they will retire. The election is irrevocable after the member attains age 60. The two formulas, A and B, are described in the following paragraph.

The Plan A retirement allowance for judge members is computed by multiplying 2.8125 percent by the final average salary for the first 16 years of service and 1.67 percent of the final average salary multiplied by the number of years of service as a judge in excess of 16. For most judge members the maximum amount is limited to 65 percent of final average salary. The Plan B retirement allowance for judge members is computed by multiplying 3.75 percent by the final average salary for the first 16 years of service and 2.0 percent of the final average salary multiplied by the number of years of service as a judge in excess of 16 years of service. For most judge members the maximum amount is limited to 75 percent of final average salary. Plan B requires a judge to serve up to 35 days per year for a period of five years as a pro tem judge. There is no actuarial reduction for retirement before age 65.

2. Death Benefits

Upon the death of a non-retired member, the beneficiary receives a lump-sum refund of the member's account balance (accumulated contributions and interest). In addition, the beneficiary will receive a lump-sum payment from employer funds equal to the account balance, provided one or more of the following conditions are met:

- the member was employed by a PERS employer at the time of death,
- the member died within 120 days after termination of PERS-covered employment,
- the member died as a result of injury sustained while employed in a PERS-covered job, or

- the member was on an official leave of absence from a PERS-covered job at the time of death.

A member's beneficiary may choose a monthly payment for life instead of the lump-sum or a combination of lump-sum and monthly payments, if eligible. The monthly payment must be a minimum of $30 per month for deaths that occur July 30, 2003, and earlier; $200 per month for deaths that occur after July 30, 2003.

3. Disability Benefits

A member with 10 or more years of creditable service who becomes disabled from other than duty-connected causes may receive a non-duty disability benefit. A disability resulting from a job-incurred injury or illness qualifies a member (including PERS judge members) for disability benefits regardless of the length of PERS-covered service. Upon qualifying for either a non-duty or duty disability, service time is computed to age 58 (55 for Police and Fire members) when determining the monthly benefit.

Judge members of PERS who have served a minimum of six consecutive years and who become physically or mentally incapacitated are entitled to benefits as provided in ORS 238.555.

4. Benefit Changes After Retirement

Members may choose to continue participation in their Variable Account after retiring and may experience annual benefit fluctuations due to changes in the market value of the underlying global equity investments of that account.

Under ORS 238.360 monthly benefits are adjusted annually through cost-of-living changes (COLA). The COLA is capped at 2.0 percent.

b. OPSRP Pension Program

1. Pension Benefits

This portion of OPSRP provides a life pension funded by employer contributions. Benefits are calculated with the following formula for members who attain normal retirement age:

Police and Fire: 1.8 percent is multiplied by the number of years of service and the final average salary. Normal retirement age for Police and Fire members is age 60 or age 53 with 25 years of retirement credit. To be classified as a Police and Fire member, the individual must have been employed continuously as a Police and Fire member for at least five years immediately preceding retirement.

General Service: 1.5 percent is multiplied by the number of years of service and the final average salary. Normal retirement age for General Service members is age 65, or age 58 with 30 years of retirement credit.

A member of the pension program becomes vested on the earliest of the following dates: the date the member completes 600 hours of service in each of five calendar years, the date the member reaches normal retirement age, and, if the pension program is terminated, the date on which termination becomes effective.

2. Death Benefits

Upon the death of a non-retired member, the spouse or other person who is constitutionally required to be treated in the same manner as the spouse receives for life 50 percent of the pension that would otherwise have been paid to the deceased member. The surviving spouse or other person may elect to delay payment of the death benefit, but payment must commence no later than December 31 of the calendar year in which the member would have reached 70½ years.

3. Disability Benefits

A member who has accrued 10 or more years of retirement credits before the member becomes disabled or a member who becomes disabled due to job-related injury shall receive a disability benefit of 45 percent of the member's salary determined as of the last full month of employment before the disability occurred.

c. Individual Account Program

1. Benefit Terms

An IAP member becomes vested on the date the employee account is established or on the date the rollover account was established. If the employer makes optional employer contributions for a member, the member becomes vested on the earliest of the following dates: the date the member completes 600 hours of service in each of five calendar years, the date the member reaches normal retirement age, the date the IAP is terminated, the date the active member becomes disabled, or the date the active member dies. The accounts fall under Internal Revenue Code Section 401(a).

Upon retirement, a member of the IAP may receive the amounts in his or her employee account, rollover account, and vested employer account as a lump-sum payment or in equal installments over a 5-, 10-, 15-, 20-year period or an anticipated life span option. Installment amounts vary with market returns as the account remains invested while in distribution. When chosen, the distribution option must result in a $200 minimum distribution amount, or the frequency of the installments will be adjusted to reach that minimum.

2. Death Benefits

Upon the death of a non-retired member, the beneficiary receives in a lump sum the member's account balance, rollover account balance, and vested employer optional contribution account balance. If a retired member dies before the installment payments are completed, the beneficiary may receive the remaining installment payments or choose a lump-sum payment.

3. Recordkeeping

PERS contracts with Voya Financial to maintain IAP participant records.

d. Other Postemployment Healthcare Benefits

ORS 238.420 established the Retirement Health Insurance Account (RHIA) and authorizes a payment of up to $60 from RHIA toward the monthly cost of health insurance for eligible PERS members. RHIA is a cost-sharing multiple-employer OPEB plan for 904 participating employers. The plan was closed to new entrants hired on or after August 29, 2003.

To be eligible to receive this monthly payment toward the premium cost the member must: (1) have eight years or more of qualifying service in PERS at the time of retirement or receive a disability allowance as if the member had eight years or more of creditable service in PERS, (2) receive both Medicare Parts A and B coverage, and (3) enroll in a PERS-sponsored health plan.

A surviving spouse or dependent of a deceased PERS retiree who was eligible to receive the subsidy is eligible to receive the subsidy if he or she (1) is receiving a retirement benefit or allowance from PERS or (2) was insured at the time the member died and the member retired before May 1, 1991.

For the year ended June 30, 2018, PERS employers contributed 0.07 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA benefits. PERS employers contributed 0.43 percent of all PERS-covered salaries to amortize the unfunded actuarial accrued liability over a fixed period with new unfunded actuarial accrued liabilities being amortized over 20 years. These rates were based on the December 31, 2015 actuarial valuation. This is included in the employer contribution rates listed in Table 3 below.

Employer contributions are advance-funded on an actuarially determined basis. There is no inflation assumption for RHIA postemployment benefits because the payment amount is set by statute and is not adjusted for increases in healthcare costs. The number of active plan RHIA participants receiving benefits was 46,033 for the fiscal year ended June 30, 2018, and there were 56,200 active and 61,248 inactive members who meet the requirements to receive RHIA benefits when they retire.

ORS 238.415 established the Retiree Health Insurance Premium Account (RHIPA) and requires the Board on or before January 1 of each year to calculate the average difference between the health insurance premiums paid by retired state employees under contracts entered into by the Board and health insurance premiums paid by active state employees. ORS 238.415 authorizes payment of this average difference to qualified retired state employees. Retired state employees are qualified to receive this benefit if they had eight or more years of qualifying service with a state agency in the System at the time of retirement or are receiving a disability pension calculated as if they had eight or more years of qualifying service but are not eligible for federal Medicare coverage. RHIPA is a single-employer (the state as one employer) defined benefit OPEB plan and was closed to new entrants hired on or after August 29, 2003.

A surviving spouse or dependent of a deceased

TABLE 3

Contribution Rate Summary[1]	Defined Benefit Pension							Postemployment Healthcare	
	PERS Defined Benefit Plan					OPSRP Pension Program		RHIA	RHIPA
	Pooled Employers			Non-Pooled Employers		All Employers		All Employers	State Agencies
	State Agencies[2]	Local Government Rate Pool[3]	School Pool[3]	Political Subdivisions[3,4]	Judiciary	General Service	Police and Fire		
Employee IAP	6.00 %	6.00 %	6.00 %	6.00 %	6.00 %	6.00 %	6.00 %	0.00 %	0.00 %
Employee Normal Cost	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00
Employer Normal Cost	15.73	15.78	13.28	16.71	18.34	8.02	12.79	0.07	0.11
Unfunded Actuarial Liability	0.68	6.10	12.15	3.43	(1.28)	1.27	1.27	0.43	0.38
Total Employer Contributions	16.41 %	21.88 %	25.43 %	20.14 %	17.06 %	9.29 %	14.06 %	0.50 %	0.49 %

[1]Group average rates shown were effective July 1, 2017 through June 30, 2019.
[2]A subcomponent of the State and Local Government Rate Pool; includes UAL payment rate offset.
[3]Does not include UAL payment rate offsets.
[4]Non-pooled Political Subdivisions are valued separately for the Defined Benefit Plan.

retired state employee is eligible to receive the subsidy if he or she (1) is receiving a retirement benefit or allowance from PERS or (2) was insured at the time the member died, and the member retired on or after September 29, 1991.

For the year ended June 30, 2018, state agencies contributed 0.11 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIPA benefits. State agencies contributed 0.38 percent of all PERS-covered salaries to amortize the unfunded actuarial accrued liability over a fixed period with new unfunded actuarial accrued liabilities being amortized over 20 years. These rates were based on the December 31, 2015 actuarial valuation. This is included in the employer contribution rates listed in Table 3 on the previous page.

The number of active plan RHIPA participants receiving benefits was 1,228 for the fiscal year ended June 30, 2018. As of June 30, 2018, there were 15,090 active members who meet the requirements to receive RHIPA benefits when they retire. Inactive members are not eligible for these benefits. All subsidy payments from the RHIA and RHIPA are initially deposited in the Standard Retiree Health Insurance Account, as described on page 67, and subsequently remitted to the appropriate PERS health plan.

e. Deferred Compensation Plan

Deferred compensation plans are authorized under Internal Revenue Code Section 457. The Oregon Legislature enacted Chapter 179, Oregon Laws 1997 which established the Deferred Compensation Fund. ORS 243.400 to 243.507 established and provided for PERS to administer the state deferred compensation plan, known as the Oregon Savings Growth Plan (OSGP). As of June 30, 2018, the fair value of investments was $1,885.2 million.

The plan is a benefit available to all state employees. To participate, an employee executes an individual agreement with the state deferring current earnings to be paid at a future date. Participants in the plan are not required to pay federal and state income taxes on the deferred contributions and earnings until the funds are received. Participants or their beneficiaries cannot receive the funds until at least one of the following occurs: termination by reason of resignation, death, disability, or retirement; unforeseeable emergency; or by requesting a *de minimis* distribution from inactive accounts valued less than $5,000. A loan program is also available for eligible participants. Member loans receivable at June 30, 2018, totaled $12.3 million. Of that amount, $9.9 million is not expected to be collected within one year.

PERS contracts with Voya Financial to maintain OSGP participant records. The Oregon State Treasury, as custodian of the assets, also contracts with State Street Bank and Trust Company to provide financial services. There are 21 investment options with varying degrees of market risk. Up to five financial institutions provide investment services in mutual funds for each investment option. A participant receives a blend of these mutual funds within the investment option. Participants direct the selection of investment options and also bear any market risk. The Oregon State Treasury has no liability for losses under the plan but does have the prudent investor responsibility of due care. Total membership as of June 30, 2018, was 25,578.

PERS may assess a charge to the participants not to exceed 2.0 percent on amounts deferred, both contributions and investment earnings, to cover costs incurred for administering the program. Actual charges to participants, including investment charges, for the year ended June 30, 2018, averaged 0.22 percent of amounts deferred.

Oregon Revised Statute 243.505 established a Deferred Compensation Advisory Committee to provide input to the PERS Board. This committee is composed of seven members who meet at least quarterly.

f. Standard Retiree Health Insurance Account

ORS 238.410 established the Standard Retiree Health Insurance Account (SRHIA), a public entity risk pool. SRHIA is both a risk sharing and insurance purchasing pool. The Board contracts for medical and hospital insurance on behalf of retired members. Members and their dependents are eligible for PERS healthcare coverage if the member is receiving a retirement allowance or benefit under the System. A surviving spouse or dependent of a PERS retiree is eligible to participate if he or she was covered under the health plan at the time of the retiree's death. As of June 30, 2018, there are 59,190 retirees and their dependents participating in the health insurance program.

PERS has contracted with various carriers on an insurance purchasing basis and remits premiums collected from participating members to the carriers on a monthly basis. PERS has contracted with MODA Health for claims payment services for a minimum premium funding plan and also remits premiums monthly for stop-loss coverage. SRHIA is ultimately at risk for all amounts collected and on deposit with MODA Health and other health insurance service providers, which totaled approximately $11.9 million as of June 30, 2018. MODA Health becomes responsible for claims in excess of $200,000 per year per individual and all claims in excess of contractually required reserves on deposit with MODA Health.

In fiscal year 2018, SRHIA recognized Reinsurance Reimbursement and Rebate receivables of approximately $20.0 million. These receivables were primarily comprised of $15.2 million in reinsurance settlements, $2.8 million in outstanding drug rebates, and $2.0 million in coverage gap discounts, which reflect changes in the prior year estimated receivables. The System, through MODA Health, provides a custom Medicare Part D prescription drug plan known as an Employer Group Waiver Plan (EGWP). EGWP subsidies can include direct subsidies, low income cost sharing subsidies, low income premium subsidies, reinsurance subsidies, and coverage gap discounts. Reinsurance subsidies are reported as operating revenues; coverage gap discounts along with pharmacy rebates are reported as an offset to claims expense.

The current estimate of Incurred But Not Reported (IBNR) insurance claims is $9.2 million.

D. Contributions

PERS' funding policy provides for periodic member and employer contributions at rates established by the Board, subject to limits set in statute. The rates established for member and employer contributions were approved based on the recommendations of the System's third-party actuary.

a. Member Contributions

Beginning January 1, 2004, all member contributions, except for contributions by judge members, were placed in the OPSRP Individual Account Program (IAP). Prior to that date, all member contributions were credited to the Defined Benefit Pension Plan. Member contributions are set by statute at 6.0 or 7.0 percent of salary and are remitted by participating employers. The contributions are either deducted from member salaries or paid by the employers on the members behalf. The Member Reserve, described in Note 6.A., represents accumulated member contributions and earnings allocations made prior to January 1, 2004, and subsequent earnings allocations less refunds and amounts transferred to reserves for retirements and disabilities. The IAP member accounts represent member contributions made on or after January 1, 2004, plus earnings allocations less disbursements for refunds, death benefits, and retirements.

b. Employer Contributions

PERS funding policy provides for monthly employer contributions at actuarially determined rates. These contributions, expressed as a percentage of covered payroll, are intended to accumulate sufficient assets to pay benefits when due. This funding policy applies to the PERS Defined Benefit Plan and the Other Postemployment Benefit Plans.

Employer contribution rates during the period were based on the December 31, 2015 actuarial valuation, which became effective July 1, 2017. The state of Oregon and certain schools, community colleges, and political subdivisions have made unfunded actuarial liability payments, and their rates have been reduced. See the contribution rate summary provided in Table 3 on page 46.

1. PERS Defined Benefit Plan Contributions (ORS 238)

Pension rates for the State and Local Government Rate Pool were 21.88 percent, schools 25.43 percent, and judiciary 17.06 percent of PERS-covered salaries, effective July 1, 2017. Political subdivisions that have not joined the State and Local Government Pool had an average pension rate of 20.14 percent.

Oregon Laws 2001, Chapter 945, Section 13 authorized the establishment of the State and Local Government Rate Pool. Local political subdivisions were given the option to join the state of Oregon and community colleges for the actuarial purpose of calculating employer rates. Participation by local political subdivisions in this pool was effective for the actuarial valuation period beginning January 1, 2002.

Based on the actuarial valuation as of December 31, 2015, the state agencies, the judiciary, schools, and political subdivisions all had increases in employer contribution rates on July 1, 2017. These rate changes are measured against the actual average rates paid since July 1, 2015. Board practice is to implement new employer contribution rates July 1 of each odd-numbered year based on the valuation of the previous odd-numbered year.

2. OPSRP Pension Program Contributions (ORS 238A)

PERS employers participating in the OPSRP Pension Program participate in the same rate sharing pool and therefore share the same contribution rate. The OPSRP Pension Program employer rates effective July 1, 2017, through June 30, 2019 are 9.29 percent of covered salaries for general service employees and 14.06 percent of covered salaries for police and fire employees. These rates increased from 7.94 percent of covered salaries for general service and 12.05 percent of covered salaries for police and fire employees for the period July 1, 2015, through June 30, 2017. Each of these rates includes a component related to disability benefits for general service and police and fire members.

3. Target Date Funds

The Oregon Investment Council, responsible for all PERS fund investments, approved the transition to a Target Date Fund investment methodology for all IAP accounts beginning January 1, 2018.

This change in investment methodology reflects an investment best practice that will better protect participants from potential losses as they approach and enter retirement by gradually reducing investment risk as participants age.

Participants are placed in Target Date Funds based on their year of birth. Investments in each fund will adjust over time to reduce investment risk — and potential losses in market downturns. As the participant moves toward retirement, the investments in the fund gradually shift, becoming more conservative to help protect against market fluctuations.

Note 3 – Receivables and Payables

A. Receivables

Table 4 disaggregates receivable balances reported in the Statements of Fiduciary Net Position as Investment Sales and Other Receivables.

TABLE 4

Accounts Receivable		June 30, 2018
Broker Receivable	$	2,227,387,045
Strunk and Eugene Accrual		24,458,756
Overpaid Benefits		48,336
Other		7,258,258
Total Accounts Receivable	**$**	**2,259,152,395**

The Strunk and Eugene Accrual resulted from recalculating benefits for recipients who received overpayments based on the reallocation of 1999 earnings. Approximately 66.8 percent of these receivables, or $24.4 million, is expected to be collected after June 30, 2018.

Additionally, there were $20.0 million in Reinsurance Reimbursements and Rebate receivables reported in the Statement of Net Position – Proprietary Fund.

B. Payables

Table 5 above on the right disaggregates payable balances reported in the Statements of Fiduciary Net Position as Investment Purchases and Accrued Expenses.

TABLE 5

Accounts Payable		June 30, 2018
Broker Payable	$	3,624,978,922
Pension Roll		375,453,738
Investment Fees		12,893,264
Death Benefits		24,186,357
Compensated Absences		1,816,391
Services and Supplies		931,509
Other		3,984,818
Total Accounts Payable	**$**	**4,044,244,999**

Note 4 - Investments

The Oregon State Treasury is the investment officer for the state of Oregon. Investment standards are established in ORS 293.726 and require funds to be managed as a prudent investor would do. The Oregon Investment Council (OIC) establishes policies for the investment and reinvestment of moneys in the Oregon Public Employees Retirement Fund. Policies are established based on the primary investment asset class of each investment manager and do not reflect the classifications of individual holdings as presented in the financial statements. Contracts with individual investment managers provide additional guidelines that vary from manager to manager.

A. Deposits

PERS cash and cash equivalents consist of cash on hand, deposits in the Oregon Short Term Fund (OSTF), moneys held by external investment managers, cash equivalents held by the health insurance provider, and cash held by the IAP program custodian. OSTF is a cash and investment pool that operates as a demand deposit account and is required for use by all state funds. See Table 6 below.

OSTF is separately audited by the Oregon Audits Division. The audited financial statements can be viewed at: https://sos.oregon.gov/audits/Documents/2018-26.pdf. OSTF investment risks are addressed in the notes to those financial statements.

Health Insurance Claims Fund of $11.6 million was held at US Bank. The account is identified as Public Funds, therefore, any amount in the account above Federal Deposit Insurance Corporation (FDIC) was insured by Public Funds Collateralization Program.

1. Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of a bank failure, PERS' deposits may not be recovered.

TABLE 6

Depository Account		Bank Balance
Insured	$	750,000
Oregon Short Term Fund		2,628,223,430
Health Insurance Claims Fund		11,619,103
IAP On Demand Deposit		7,060,002
Uninsured and uncollateralized		1,423,152,855
Total deposits	**$**	**4,070,805,390**

As noted above, the deposit and investment risks, including custodial risk, of the OSTF are outlined in the OSTF financial statements. As of June 30, 2018, the carrying amount of PERS' deposits in OSTF totaled $2,922.7 million, and the corresponding bank balance was $2,628.2 million.

Investment managers' deposits with custodian banks consist of cash and cash equivalents that represent buying reserves. As of June 30, 2018, there was $1,423.4 million on deposit for the accounts of the OPERF investment managers.

As of June 30, 2018, IAP On Demand Deposit Account of $7.3 million was held at State Street Bank, the custodian of the IAP program third-party administrator. The bank balance on the deposit is insured by the FDIC up to the standard maximum deposit insurance amount. The balance in excess of the FDIC limit was uninsured.

2. Foreign Currency Risk

Foreign currency risk for deposits is the risk that changes in exchange rates will adversely affect the fair value of the deposits. Foreign currency risk is controlled via contractual agreements with the investment managers. As of June 30, 2018, $52.1 million in cash and cash equivalents was exposed to foreign currency risk. The U.S. dollar balances of these deposits, organized by currency denomination, are presented in Table 12 on page 57.

3. Restricted Cash Equivalents

PERS' cash and cash equivalents at June 30, 2018, include collateral of $117.4 million held by investment managers. Swap collateral is offset by a related liability with a net settlement feature. Collateral is restricted and is not available to pay current liabilities.

B. Investments

Table 7 on the next page presents the fair value of investments held by the state of Oregon for PERS as of June 30, 2018.

1. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Observable inputs are developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are developed based on the best information available about the assumptions market participants would use in pricing the asset.

The classification of securities within the fair value hierarchy is based upon the activity level in the market for the security type and the inputs used to determine their fair value. The three levels of the hierarchy are described below:

Level 1 – Unadjusted quoted prices for identical instruments in active markets.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 – Valuations derived from valuation techniques in which significant inputs are unobservable.

Inputs used to measure fair value might fall in different levels of the fair value hierarchy. Categorization within the hierarchy is based on the lowest level input that is significant to the fair value measurement.

Equity securities are generally valued based on quoted prices from an active market and are therefore categorized in level 1. In the absence of quoted market prices, such as equity securities that trade infrequently or not at all, valuations are based on the last traded price or a price provided by investment managers and are generally categorized in level 3.

Debt securities classified as level 2, including invested securities lending collateral, are valued using the latest bid prices or evaluated quotes from independent pricing vendors. The third-party vendors use a variety of methods when pricing these securities that incorporate relevant observable market data to arrive at an estimate of what a buyer in the marketplace would pay for a security under current market conditions. When independent price sources are not available, debt securities are priced based on the last traded price or a valuation provided by the investment manager and are categorized in level 3.

Fund investments (e.g., mutual / commingled / open ended funds), valued using a unit price that is published daily and validated with a sufficient level of observable activity are categorized in level 1. If observable activity is limited, yet supports that the unit price or NAV represents an exit value of the security at the measurement date, the securities are categorized in level 2. Investments that are measured at NAV as a practical expedient, such as most private equity, alternative, opportunity and real estate investments, are excluded from the fair value hierarchy if the NAV per share (or its equivalent) was calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies. Funds not meeting this criteria are categorized in level 3.

Exchange-traded derivatives, including futures, rights and warrants, that are actively traded are valued using quoted prices and are categorized in level 1. Derivative contract valuations, such as

TABLE 7

Investments as of June 30, 2018	Fair Value
US Treasury Obligations	$ 5,571,787,649
US Treasury Obligations - Strips	164,728,277
US Treasury Obligations - TIPS	63,178,991
US Federal Agency Mortgage Securities	907,913,559
US Federal Agency Mortgage TBAs	771,853,547
US Federal Agency Debt	294,018,979
US Federal Agency Strips	35,447,010
International Debt Securities	973,752,300
Non-Government Debt Securities	249,630,195
Corporate Bonds	2,087,210,580
Bank Loans	1,400,318,438
Municipal Bonds	16,120,611
Collateralized Mortgage Obligations	469,020,041
Asset-Backed Securities	367,948,789
Guaranteed Investment Contracts[1]	177,300,377
Domestic Fixed Income Funds	1,829,956,948
Global Fixed Income Funds	48,971,506
Total Debt Securities	15,429,157,797
Derivatives in Asset Positions	187,826,428
Domestic Equity Securities	13,222,581,425
International Equity Securities	10,249,387,328
Domestic Equity Funds	2,014,805,845
Global Equity Funds	577,180,256
International Equity Funds	3,330,819,759
Target Date Funds	612,041,544
Oregon Savings Growth Plan - Self Directed	12,591,329
Total Public Equity	30,207,233,914
Real Estate and Real Estate Investment Trusts	8,326,898,466
Private Equity	16,210,706,197
Alternative Equity	5,997,324,626
Opportunity Portfolio	1,766,087,042
Total PERS Investments - Fiduciary Funds	**$ 77,937,408,042**

[1]Guranteed Investment Contracts are stated at contract value.

swaps and options, are modeled using observable pricing inputs and techniques that do not entail material subjectivity and are therefore categorized in level 2. Level 3 derivatives include securities valued at a price that has been determined by the investment manager's valuation committee.

Investments in real estate, other than real estate investment trusts which are generally valued based on an active market price and are categorized in level 1, have been valued based on the NAV per share (or its equivalent), as provided by the general partner. This type includes 64 commingled real estate funds, structured as limited partnerships, where the funds have a finite term. Distributions from the funds will be received as the underlying investments of the funds are liquidated. Liquidation is expected to take place during the 5 year period following the termination of the investment period which extends to 2035. Investments in real estate also include 15 joint ventures where the investments are expected to be held for the long-term and generate cash flow that will represent a significant component of the total return. Real estate also includes investments in 5 open ended funds that permit quarterly redemption of shares, subject to certain requirements being met.

Private Equity consists of approximately 252 funds, organized as limited partnerships and limited liability companies, participating in diversified strategies including leveraged-buyouts, venture capital, growth equity, fund-of-funds, co-investments and special situations. The fair values of the private equity investments have been determined using the NAV per share (or its equivalent) as provided by the general partner or managing member. These funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 12 to 14 years.

Alternative Equity investments seek to provide diversification and inflation hedging characteristics to the fund and include investments with a focus on infrastructure and natural resources. Alternative Equity consists of 44 investments in commingled funds organized as limited partnerships and limited liability companies. The fair values of the investments have been determined using a NAV per share (or its equivalent) of the investments. For alternative real assets, which includes 38 of the 44 funds, the funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 10 to 14 years. Alternative diversifying strategies permit periodic redemption of shares, subject to certain requirements being met, and consist of 5 funds investing in diversifying hedge fund strategies and one direct investment in a holding company.

The Opportunity Portfolio includes strategies that fall outside of other asset classes and include 16 funds investing in a broad range of performing and distressed debt and debt related securities as well as royalties and insurance-based investments. The fair values of the investments have been determined using a NAV per share (or its equivalent) of the investments. For 11 of the 16 funds, the funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 10 to 14 years. The remaining five funds are open ended, permitting periodic redemption of shares.

PERS has the following recurring fair value measurements as of June 30, 2018. See Table 8 on the next pate.

Disclosures regarding redemption and investments valued at the NAV per share (or its equivalent), including Unfunded Commitments, are presented in Table 9 on page 54.

2. Rate of Return

For the year ended June 30, 2018, the annual money-weighted rate of return on defined benefit pension plan investments, net of defined benefit pension plan investment expenses, was 9.70 percent. The annual money-weighted rates of return on the other postemployment healthcare benefits (OPEB) investments, net of OPEB investment expenses, were 9.69 percent for the Retirement Health Insurance Account (RHIA) and 10.15 percent for the Retiree Health Insurance Premium Account (RHIPA). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the timing of cash flows and the changing amounts actually invested.

3. Investment Concentrations

As of June 30, 2018, there were no organizations that represent 5 percent or more of the pension plan's fiduciary net position, or total investments.

4. Credit Risk Debt Securities

It is OIC's policy that no more than 30 percent of the fixed income manager positions be below investment grade. Securities with a quality rating of below BBB- are considered below investment grade. There is no policy restriction on other investment managers who may hold debt securities.

As of June 30, 2018, the fair value of below grade investments, excluding unrated securities, is $2,286.7 million, or 24.74 percent, of total securities subject to credit risk and 14.82 percent of total debt securities. The weighted quality rating average is A.

Unrated securities include $85.2 million in bank loans, $1,878.9 million in domestic and international

TABLE 8

Investments and Derivative Instruments Measured at Fair Value

		Fair Value Measurements Using		
	6/30/2018	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Debt Securities				
US Treasury Obligations	$ 5,571,787,649	$ –	$ 5,571,787,649	$ –
US Treasury Obligations - Strips	164,728,277	–	164,728,277	–
US Treasury Obligations - TIPS	63,178,991	–	63,178,991	–
US Federal Agency Mortgage Securities	907,913,559	–	907,913,559	–
US Federal Agency Mortgage TBAs	771,853,547	–	771,853,547	–
US Federal Agency Debt	294,018,979	–	294,018,979	–
US Federal Agency Strips	35,447,010	–	35,447,010	–
Non-Government Debt Securities	249,630,195	–	249,630,195	–
Corporate Bonds	2,690,305,018	–	2,662,513,660	27,791,358
Bank Loans	1,557,890,680	–	1,521,657,982	36,232,698
Municipal Bonds	16,120,611	–	16,120,611	–
Collateralized Mortgage Obligations	478,085,376	–	476,360,835	1,724,541
Asset-Backed Securities	571,969,074	–	557,311,295	14,657,779
Domestic Fixed Income Funds	1,829,956,948	–	1,829,956,948	–
Global Fixed Income Funds	48,971,506	32,800,650	16,170,856	–
Total Debt Securities[1]	15,251,857,420	32,800,650	15,138,650,394	80,406,376
Public Equity				
Domestic Equity Securities	13,222,581,425	13,145,997,323	–	76,584,102
International Equity Securities	10,249,387,328	10,206,488,927	–	42,898,401
Domestic Equity Funds	2,014,805,845	98,629,235	1,916,176,610	–
Global Equity Funds	577,180,256	34,151,027	543,029,229	–
International Equity Funds	3,330,819,759	1,173,513,394	2,157,306,365	–
Target Date Funds	612,041,544	–	612,041,544	–
Oregon Savings Growth Plan - Self Directed	12,591,329	12,591,329	–	–
Total Public Equity	30,019,407,486	24,671,371,235	5,228,553,748	119,482,503
Real Estate Investment Trusts	829,806,504	829,805,072	–	1,432
Private Equity	15,840,484	–	–	15,840,484
Total Investments by Fair Value Level	**$ 46,116,911,894**	**$ 25,533,976,957**	**$ 20,367,204,142**	**$ 215,730,795**

TABLE 8 continues on the next page

TABLE 8 continuing from the previous page

Investments Measured at the Net Asset Value (NAV)				
Real Estate				
Real Estate Investments	$ 6,564,024,808			
Real Estate Open Ended Funds	933,067,154			
Total Real Estate	7,497,091,962			
Private Equity	16,194,865,713			
Alternative Equity				
Alternative Real Assets	3,159,369,370			
Alternative Diversifying Strategies	2,837,955,256			
Total Alternative Equity	5,997,324,626			
Opportunity Portfolio				
Opportunity Private Investments	663,484,261			
Opportunity Open Ended Funds	1,102,602,781			
Total Opportunity Portfolio	1,766,087,042			
Total Investments Measured at the NAV	31,455,369,343			
Total Investments Measured at Fair Value	**$ 77,572,281,237**			
Investments Derivative Instruments				
Credit Default Swaps	$ 1,594,142	$ –	$ 1,594,142	$ –
Foreign Exchange Forwards	(45,669,007)	–	(45,669,007)	–
Forwards	157,723,135	–	–	157,723,135
Interest Rate Swaps	3,103,621	–	3,103,621	–
Options	5,669,676	34,200	5,635,476	–
Rights and Warrants	19,575,109	17,893,836	–	1,681,273
Total Return Swaps	160,713	–	160,713	–
Total Assets	142,157,389	17,928,036	(35,175,055)	159,404,408
Credit Default Swaps	(4,208,250)	–	(4,208,250)	–
Foreign Exchange Forwards	104,572,747	–	104,572,747	–
Interest Rate Swaps	(1,988,602)	–	(1,988,602)	–
Options	(6,202,582)	–	(6,202,582)	–
Total Return Swaps	(1,341,803)	–	(1,341,803)	–
Total Liabilities	90,831,510	–	90,831,510	–
Total Investments Derivative Instruments	**$ 232,988,899**	**$ 17,928,036**	**$ 55,656,455**	**$ 159,404,408**
Invested Securities Lending Collateral				
Asset-Backed Securities	$ 191,603,706	$ –	$ 191,603,706	$ –
U.S. Government & Agencies	49,997,556	–	49,997,556	–
Certificates of Deposit	221,030,765	–	221,030,765	–
Commercial Paper	431,060,591	–	431,060,591	–
Corporate Bonds	195,207,212	–	195,207,212	–
Repurchase Agreements	71,000,000	–	71,000,000	–
Total Invested Securities Lending Collateral[2]	**$ 1,159,899,830**	**$ –**	**$ 1,159,899,830**	**$ –**

[1]Guaranteed Investment Contracts are excluded from the table as these are stated at contract value.

[2]For OSTF's participation in securities lending activity, refer to their audited financial statements at: https://sos.oregon.gov/audits/Documents/2018-26.pdf

TABLE 9

Investments Measured at the Net Asset Value

	Fair Value	Unfunded Commitments*	Redemption Frequency (If Currency Eligible)	Redemption Notice Period
Real Estate				
Real Estate Investments	$ 6,564,024,808	$ 1,914,185,245	N/A	N/A
Real Estate Open Ended Funds	933,067,154	-	Quarterly	15 - 90 days
Private Equity	16,210,706,197	7,171,218,830	N/A	N/A
Alternative Equity				
Alternative Real Assets	3,159,369,370	2,344,990,006	N/A	N/A
Alternative Diversifying Strategies	2,837,955,256	-	Monthly	3 - 75 days
Opportunity Portfolio				
Opportunity Private Investments	663,484,261	479,910,746	N/A	N/A
Opportunity Open Ended Funds	1,102,602,781	210,107,155	Monthly/Quarterly	5 - 90 days
Total	**$ 31,471,209,827**	**$ 12,120,411,982**		

* Excludes unfunded commitments associated with investments included in the fair value hierarchy (Levels 1, 2, and 3) and new commitments not yet funded at 6/30/2018.

fixed income funds, $177.3 million in guaranteed investment contracts, and $203.8 million in other debt securities. Unrated federal agency securities include $302.2 million in Federal Home Loan Mortgage Corporation (FHLMC), $907.3 million in Federal National Mortgage Association (FNMA), and $401.6 million in other federal agency securities. These federal agency securities are not rated by the credit rating agencies as these are implicitly guaranteed by the U.S. government. Table 10 on the next page details the quality ratings for credit risk debt securities as of June 30, 2018.

5. Custodial Credit Risk

Custodial credit risk for investments is the risk that in the event of a failure of the counterparty, PERS will not be able to recover the value of the investments or collateral securities that are in the possession of an outside party. OIC has no formal policy regarding the holding of securities by a custodian or counterparty. As of June 30, 2018, no investments were exposed to custodial credit risk.

6. Concentrations of Credit Risk

OIC expects investment managers to maintain diversified portfolios. There is no limit on single issuer investments for domestic, global, and international equity fund managers. Policy states that the asset classes will be diversified across their respective markets. Additionally, both passive and active investing strategies are employed, and several external managers engage in active management. OIC provides the following limitations for fixed income manager positions:

- obligations issued or guaranteed by the U.S. government, U.S. agencies, or government-sponsored enterprises — no restriction;
- obligations of other national governments — no more than 10 percent of the debt investment portfolio per issuer;
- private mortgage-backed and asset-backed securities, unless collateral is credit independent of the issuer and the security's credit enhancement is generated internally — no more than 10 percent of the debt investment portfolio per issuer; 25 percent per issuer if the collateral exception is met; and
- other issuers, excluding investments in commingled vehicles — no more than 3 percent of the debt investment portfolio.

As of June 30, 2018, there were no single issuer debt investments that exceeded the above guidelines.

7. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed within the portfolio using the effective duration methodology. Policies state that the fixed income manager positions will maintain a weighted average effective duration within plus or minus 20 percent of the benchmark's effective duration. There is no policy restriction for non-fixed income investment managers who may hold fixed income positions. As of June 30, 2018, the weighted average duration of PERS' fixed income portfolio was 3.93 years.

TABLE 10

Schedule of Credit Risk at June 30, 2018

Quality Rating		Fair Value
AAA	$	730,219,399
AA		179,120,118
A		658,726,493
BBB		1,431,583,284
BB		496,130,838
B		1,362,907,208
CCC		420,434,216
CC		7,213,252
Not Rated		2,345,273,766
Not Rated - U.S. Agency[1]		1,611,101,584
Total Subject to Credit Risk		**9,242,710,158**
U.S. Government Guaranteed Securities		6,186,447,639
Total Debt Securities	**$**	**15,429,157,797**

[1] Federal Agency securities are not rated by the credit rating agencies as they carry an implicit guarantee of the US Government. See note disclosure for more detail.

TABLE 11

Schedule of Interest Rate Risk - Effective Duration at June 30, 2018

Investments		Fair Value	Effective Weighted Duration Rate (in years)
US Treasury Obligations	$	5,571,787,649	6.85
US Treasury Obligations - Strips		164,728,277	0.16
US Treasury Obligations - TIPS		63,178,991	5.72
US Federal Agency Mortgage Securities		907,913,559	3.43
US Federal Agency Mortgage TBAs		771,853,547	3.57
US Federal Agency Debt		294,018,979	1.47
US Federal Agency Strips		35,447,010	1.23
International Debt Securities		947,420,653	3.23
Non-US Government Debt Securities		134,274,681	8.54
Corporate Bonds		2,087,040,659	5.68
Bank Loans		1,323,615,456	0.63
Municipal Bonds		16,120,611	10.10
Collateralized Mortgage Obligations		469,020,041	3.58
Asset-Backed Securities		367,948,789	1.65
Domestic Fixed Income Funds		1,829,956,948	5.10
Global Fixed Income Funds		48,971,506	1.37
No Effective Duration:			
International Debt Securities		26,331,647	N/A
Non-US Government Debt Securities		115,355,514	N/A
Corporate Bonds		169,921	N/A
Bank Loans		76,702,982	N/A
Guatanteed Investment Contracts		177,300,377	N/A
Total Debt Securities		**15,429,157,797**	
Cash Equivalent - Mutual Funds - STIF		877,442,989	30 Days[1]
Cash Equivalent - Oregon Short Term Funds		2,293,819,592	188 Days[1]
Total Subject to Interest Rate Risk	**$**	**18,600,420,378**	

[1]Weighted average maturity. Pools are not rated.

Effective duration is a measure of a fixed income investment's exposure to fair value changes arising from changes in interest rates. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows. These assumptions take into consideration factors indicative of investments highly sensitive to interest rate changes, including callable options, prepayments, and other factors. These factors are reflected in the effective duration numbers provided herein.

No individual fixed income investment manager's portfolio was outside the policy guidelines at June 30, 2018. Table 11 on the previous page shows the investments by type, amount, and effective weighted duration.

At June 30, 2018, PERS held approximately $1,376.9 million in debt instruments backed by pooled mortgages, Collateralized Mortgage Obligations (CMOs), or fixed-rate mortgages. These securities represent a stream of principal and interest payments from underlying mortgages. Assets with these characteristics are susceptible to prepayment by the mortgage holders which may result in a decrease in total interest realized. The value of these securities can be volatile as interest rates fluctuate. Additionally, the risk of default exists and collateral held may potentially be insufficient to cover the principal due. PERS also held approximately $771.9 million in To-Be-Announced (TBA) federal agency-issued mortgage pools. An additional $368.0 million of debt instruments held are asset-backed securities backed primarily by automobiles, consumer credit receivables, heavy equipment leases, and student loan receivables.

8. 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. Policy states that no more than 25 percent of the fixed income manager positions may be invested in non-dollar denominated securities. As of June 30, 2018, approximately 0.87 percent of the debt investment portfolio was invested in non-dollar denominated securities. Policies for the non-fixed portion of PERS' portfolio do not limit non-dollar denominated investments. PERS utilizes a currency overlay manager to reduce risk through offsetting investments in the developed foreign currency market for international equity portfolios. See Table 12 on the next page.

9. Unfunded Commitments

OIC has entered into agreements that commit OPERF, upon request, to make additional investment purchases up to a predetermined amount. As of June 30, 2018, the OPERF had $10,758.9 million in commitments to purchase private equity investments, which includes $5,397.5 million in recallable distributions, $2,064.2 million in commitments to purchase real estate investments, $2,695.0 million in commitments to purchase alternative equity investments, which includes $458.2 million in recallable distributions, and $690.0 million in commitments to purchase opportunity portfolio investments, which includes $254.5 million in recallable distributions. These amounts are unfunded and are not recorded in the Statement of Fiduciary Net Position.

C. Securities Lending

In accordance with state investment policies, OPERF participates in securities lending transactions. Through securities lending authorization agreements, the Oregon State Treasury has authorized its custodian, State Street Bank, to lend its securities pursuant to the terms and conditions of policy and applicable agreements. Both OPERF and the borrowers maintained the right to terminate all securities lending transactions on demand. There were no significant violations of the provisions of securities lending agreements during the period of these financial statements.

The custodian had the authority to loan short-term, fixed income, and equity securities and to receive as collateral U.S. dollar and foreign currency cash, U.S. government and agency securities, letters of credit, and foreign sovereign debt of Organization of Economic Cooperation and Development (OECD) countries. Borrowers were required to deliver collateral for each loan equal to not less than 102 percent of the market value of loaned U.S. securities and international fixed income securities, or 105 percent in the case of international equity. The custodian did not have the ability to pledge or sell collateral securities absent a borrower default, and OPERF did not impose any restrictions during the fiscal year on the amount of the loans the custodian made on its behalf. OPERF is fully indemnified against losses due to borrower default by its current custodian. There were no losses during the year from the failure of borrowers to return loaned securities and no recoveries of amounts from prior losses.

Prior to July 1, 2010, OPERF was a participant in a securities lending collateral reinvestment pool managed by State Street Global Advisors ("SSgA"), a division of State Street Bank. On July 1, 2010, OPERF withdrew from this pool and directed SSgA to allocate its share of pool assets into a new legacy fund owned exclusively by OPERF. At the same time OPERF also directed SSgA to open a new securities lending collateral reinvestment fund for ongoing lending activities. The legacy fund will be maintained until all existing assets have matured or been sold, and proceeds will be invested in the new fund. Since the assets in the legacy and new funds are wholly owned by OPERF, the balances in the funds are stated at fair value in the Statements of Fiduciary Net Position as of June 30, 2018. Previous

TABLE 12

Currency Exposures by Asset Class in US Dollar Equivalents as of June 30, 2018

Currency	Cash and Cash Equivalents	Debt Securities	Public Equity	Derivatives in Asset Positions	Real Estate	Alternative Equity	Total
Argentine peso	$ 11,561	$ –	$ –	$ –	$ –	$ –	$ 11,561
Australian dollar	1,946,904	–	362,090,215	1,291	12,516,678	–	376,555,088
Brazilian real	425,341	319,761	182,107,328	–	534,234	–	183,386,664
Canadian dollar	1,711,339	429,026	559,376,063	–	7,352,297	–	568,868,725
Chilean peso	767,117	–	15,565,208	–	–	–	16,332,325
Chinese yuan	2,292,372	791,134	84,627,783	–	–	–	87,711,289
Colombian peso	128,459	–	8,976,735	–	–	–	9,105,194
Czech koruna	79,719	–	17,373,820	–	–	–	17,453,539
Danish krone	249,656	2,486	175,424,138	–	–	–	175,676,280
Egyptian pound	755,894	–	9,668,665	–	–	–	10,424,559
Euro	5,631,854	26,266,332	1,870,663,834	29,013,182	13,536,052	706,619,338	2,651,730,592
Hong Kong dollar	2,423,503	–	666,319,688	160,909	20,111,443	–	689,015,543
Hungarian forint	136,601	–	10,930,461	–	–	–	11,067,062
Indian rupee	878,180	–	167,244,936	–	–	–	168,123,116
Indonesian rupiah	208,528	–	43,216,595	–	–	–	43,425,123
Israeli shekel	531,917	–	76,870,991	–	1,714,079	–	79,116,987
Japanese yen	12,917,118	72,418,095	1,530,527,908	86,237	6,433,305	–	1,622,382,663
Kenya shilling	–	–	5,182,198	–	–	–	5,182,198
Malaysian ringgit	344,422	6,366,714	76,602,962	1,699	–	–	83,315,797
Mexican peso	4,074,704	15,028,262	54,399,343	–	23,222,052	–	96,724,361
Moroccan dirham	–	–	2,020,143	–	–	–	2,020,143
New Zealand dollar	496,713	–	35,277,749	581,216	736,221	–	37,091,899
Nigerian naira	43,909	–	8,469,424	–	–	–	8,513,333
Norwegian krone	1,570,666	–	108,410,943	–	–	–	109,981,609
Pakistani rupee	18,882	–	–	–	–	–	18,882
Peruvian nuevo sol	1,641	–	–	–	–	–	1,641
Philippine peso	51,082	–	13,843,291	–	–	–	13,894,373
Polish zloty	246,824	–	21,905,384	–	–	–	22,152,208
Pound sterling	4,606,514	4,461,319	1,777,745,419	1,813,306	5,036,855	–	1,793,663,413
Qatar riyal	3,298	–	479,347	–	–	–	482,645
Romanian leu	–	–	2,007,285	–	–	–	2,007,285
Singapore dollar	511,531	8,214,449	74,259,968	26	4,131,268	–	87,117,242
South African rand	1,205,647	–	182,734,280	–	39,027	–	183,978,954
South Korean won	1,091,868	–	463,583,737	–	19,061	–	464,694,666
Swedish krona	906,055	–	210,078,968	838,940	–	–	211,823,963
Swiss franc	325,503	–	441,249,285	1,355	–	–	441,576,143
Taiwan dollar	3,721,085	–	286,251,676	–	–	–	289,972,761
Thai baht	426,608	–	104,249,853	10,537	1,244,704	–	105,931,702
Tunisia dinar	–	–	–	13	–	–	13
Turkish lira	686,116	–	61,523,562	–	671,851	–	62,881,529
United Arab Emirates dirham	37,034	–	8,441,622	–	–	–	8,478,656
Vietnamese dong	614,527	–	17,361,898	–	–	–	17,976,425
Total Subject to Foreign Currency Risk	**$ 52,080,692**	**$ 134,297,578**	**$ 9,737,062,705**	**$ 32,508,711**	**$ 97,299,127**	**$ 706,619,338**	**$ 10,759,868,151**

securities lending collateral reinvestment pool balances were stated at "constant value," which approximates fair value, since OPERF was a participant in a pool along with other qualified plans, due to the lending agent's practice of redeeming shares at $1.00 per unit. The investments in the legacy and new funds are held by the custodian.

The maturities of investments made with cash collateral did not generally match the maturities of the securities loaned. Since the securities loaned are callable on demand by either the lender or borrower, the life of the loans at June 30, 2018, is effectively one day. On June 30, 2018, OPERF had no credit risk exposure to borrowers because the amounts OPERF owes borrowers exceeds the amounts borrowers owe OPERF.

On June 30, 2018, the fair value of cash collateral received and invested cash collateral, excluding allocations of securities lending balances in OSTF, were $1,171.0 million and $1,170.8 million, respectively. The cumulative unrealized loss in invested cash collateral of $0.2 million has been recognized in securities lending income in the Statements of Changes in Fiduciary Net Position in the period in which the gain or losses occurred. For the fiscal year ended June 30, 2018, total income from securities lending activity was $30.1 million, and total expenses for the period were $19.9 million for a net gain of $10.2 million.

OSTF also participates in securities lending activity. OPERF receives an allocated portion of this activity based on its deposits in OSTF. As of June 30, 2018, OPERF's allocated portion of cash

TABLE 13

Securities Lending as of June 30, 2018

Investment Type	Securities on Loan at Fair Value	Cash and Securities Collateral Received	Investments of Cash Collateral at Fair Value
U.S. Treasury Securities	$ 1,174,637,821	$ 1,198,884,275	$ 89,036,922
U.S. Agency Securities	64,922,009	66,249,168	-
Domestic Equity Securities	1,046,502,832	1,072,444,523	665,077,448
Domestic Debt Securities	324,266,858	330,786,670	294,995,524
International Equity Securities	473,091,986	496,977,594	119,686,649
International Debt Securities	1,949,603	2,003,580	2,003,272
Allocation from Oregon Short Term Fund	60,346,300	61,594,553	13,234,866
Total	**$ 3,145,717,409**	**$ 3,228,940,363**	**$ 1,184,034,681**

collateral received and invested cash collateral were $13.2 million and $13.2 million, respectively.

Cash collateral received for OSTF securities lent is invested in securities lending collateral pools and is not exposed to custodial risk. For more information on OSTF's participation in securities lending activity, refer to their audited financial statements at: https://sos.oregon.gov/audits/Documents/2018-26.pdf.

Table 13 above shows the combined balances of the securities on loan, cash and securities collateral received, and investments of cash collateral held. Securities lending collateral subject to credit risk as of June 30, 2018, is shown in Table 14 on the next page. Securities lending collateral subject to interest rate risk as of June 30, 2018, is shown in Table 15, also on the next page.

D. Derivatives

Oregon Investment Council policy allows, with some restrictions, for the use of derivative instruments in the prudent management of OPERF investments. Certain internally and externally managed accounts are allowed, through contract and policy, to invest in derivative instruments to carry out their investment management activities. Risks inherent with derivatives are managed through investment management's adherence to contractual and policy prescribed terms that are consistent with OPERF's investing objectives.

All derivative instruments held by OPERF are considered investments. The fair value of OPERF derivative investments is reported in the Investment Sales and Other Receivables, Investment Purchases and Accrued Expenses, and the Public Equity lines of the Statements of Fiduciary Net Position – Pension and Other Postemployment Plans on pages 33 and 34. Changes in fair value during the fiscal year are reported in the Net Appreciation/(Depreciation) in Fair Value of Investments line of the Statements of Changes in Fiduciary Net Position – Pension and Other Postemployment Plans on pages 35 and 36.

Table 16 on page 60 presents the related net appreciation/(depreciation) in fair value amounts and the notional amounts of derivative instruments outstanding as of June 30, 2018.

A forward foreign currency exchange contract is a forward contract that is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. The fair value of a foreign currency forward is determined by the difference between the contract exchange rate and the closing exchange rate, at the end of reporting period. Risks associated with such contracts include movement in the value of foreign currencies and the ability of the counterparty to perform.

A futures contract represents a commitment to purchase or sell an underlying asset at a future date and at a specified price. Futures contracts have standardized terms and are traded on exchanges. The counterparty credit risk for futures is generally less than for privately negotiated forward contracts, since the clearinghouse, which is the issuer or counterparty to each exchange-traded future, settles daily the net change in the futures contract's value in cash with the broker and results in the contract itself having no fair value at the end of any trading day.

A swap is an agreement that obligates two parties to exchange a series of cash flows or the net value of cash flows at specified intervals based upon, or calculated by, reference to changes in specified prices or rates for a specified amount of an underlying asset. Swaps are privately negotiated contracts with customized terms and are transacted in over-the-counter markets. OPERF held various types of swaps including credit default, interest rate, and total return swaps. The payment flows are usually netted against each other, with the difference being paid by one party or another. In

TABLE 14

Securities Lending Invested Cash Collateral Subject to Credit Risk as of June 30, 2018

Quality Rating		Fair Value
AAA	$	239,066,345
AA[1]		770,118,055
A		77,180,513
B		2,534,917
Total Subject to Credit Risk		**1,088,899,830**
U.S. Government Guaranteed Repurchase Agreements		71,000,000
Allocation from Oregon Short Term Fund		13,234,866
Cash		10,899,985
Total Securities Lending Invested Cash Collateral	**$**	**1,184,034,681**

[1]Commercial paper ratings of A-1+/A-1/P-1 categorized as AA.

TABLE 15

Securities Lending Invested Cash Collateral Subject to Interest Rate Risk as of June 30, 2018

Security Type		Fair Value	Effective Weighted Duration Rate (in days) [1]
Asset-Backed Securities	$	191,603,706	16
U.S. Government & Agencies		49,997,556	0 [2]
Negotiable Certificates of Deposit		221,030,765	67
Corporate Bonds		195,207,212	60
Commercial Paper		431,060,591	42
Total Subject to Interest Rate Risk		1,088,899,830	**41**
U.S. Government Guaranteed Repurchase Agreements		71,000,000	
Allocation from Oregon Short Term Fund		13,234,866	
Cash		10,899,985	
Total Securities Lending Invested Cash Collateral	**$**	**1,184,034,681**	

[1] Weighted average days to maturity or next reset date.
[2]0.0365 days

TABLE 16

Derivative Instruments as of June 30, 2018

Investment Derivatives		Net Appreciation/ (Depreciation) in Fair Value of Investments [1,3]	Classification		Fair Value		Notional Value [2]
Credit Default Swaps Bought	$	(300,842)	Public Equity	$	(31,679)	$	37,869,000
Credit Default Swaps Written		304,466	Public Equity		(2,582,429)		151,061,000
Fixed Income Futures Long		(82,616,040)	Public Equity		–		3,102,750,000
Fixed Income Futures Short		4,671,684	Public Equity		–		(452,911,048)
Fixed Income Options Bought		(325,151)	Public Equity		4,584,176		317,776,800
Fixed Income Options Written		(98,775)	Public Equity		(4,954,924)		(1,065,368,971)
Foreign Currency Options Bought		(5,947,170)	Public Equity		1,051,300		128,331,196
Foreign Currency Options Written		6,270,758	Public Equity		(1,067,996)		(144,041,475)
Futures Options Bought		(4,138,759)	Public Equity		34,200		380,000
Futures Options Written		4,319,804	Public Equity		(179,662)		(390,500)
Foreign Exchange Forwards		20,928,018	Receivables/Payables		58,903,740		6,040,791,019
Index Futures Long		112,754,804	Public Equity		–		4,694,520
Index Futures Short		(94,195,302)	Public Equity		–		(1,892,610)
Pay Fixed Interest Rate Swaps		13,567,938	Public Equity		5,046,367		823,612,394
Receive Fixed Interest Rate Swaps		(6,214,717)	Public Equity		(3,931,348)		1,049,807,994
Rights		278,842	Public Equity		1,586,890		7,644,706
Total Return Swaps Bond		(4,733,467)	Public Equity		339,486		107,756,383
Total Return Swaps Equity		11,782,191	Public Equity		(1,520,576)		(129,506,412)
Warrants		3,061,867	Public Equity		17,988,219		2,610,062
Total	**$**	**(20,629,851)**		**$**	**75,265,764**	**$**	**9,980,974,058**

[1] Negative values (in brackets) refer to losses.
[2] Notional may be a dollar amount or size of underlying for futures, rights, warrants, and options. Negative values refer to short positions.
[3] Excludes futures margin payments.

addition, collateral may be pledged or received by OPERF in accordance with the terms of the respective swap agreements to provide value and recourse to OPERF or its counterparties. Swaps are subject to general market risk, liquidity risk, credit risk, interest rate risk and the risk that the counterparty may fail to perform.

An option is an instrument that gives one party the right, but not the obligation, to buy or sell an underlying asset from or to another party at a fixed price over a specified period of time. In writing an option, OPERF bears the market risk of an unfavorable change in the price of the underlying investment of the written option. Exercise of an option written by OPERF could result in OPERF selling or buying an asset at a price different from the current market value. Options may be subject to interest rate risk, general market risk, liquidity risk, credit risk, foreign currency risk, and, for non-exchange traded options the risk of the counterparty's ability to perform.

Rights are the right, but not the obligation, to purchase newly issued equity shares, often in proportion to the number of shares currently owned, in a specified company, at a pre-established price on or within a pre-determined date. A warrant provides the holder the right, but not the obligation, to purchase securities from the issuing entity at a specific price and within a certain time period. In the OPERF portfolio, rights and warrants are often obtained and held due to existing investments and are subject to general market risk and liquidity risk.

Counterparty Credit Risk

Table 17 on page 61 presents a summary of counterparty credit ratings relating to derivative instruments in asset positions, as of June 30, 2018.

Interest Rate Risk

As of June 30, 2018, OPERF is exposed to interest rate risk on its various swap arrangements and options. Table 18 on page 61 presents a segmented time schedule of those instruments, and Table 19, on pages 62 and 63 shows a schedule of derivative instruments that were highly sensitive to interest rate changes.

Foreign Currency Risk

OPERF is exposed to foreign currency risk on its derivative instruments. Table 20 on page 64

TABLE 17

Derivative Instruments Subject to Counterparty Credit Risk as of June 30, 2018

Counterparty Name	Percentage of Net Exposure	S&P Rating	Fitch Rating	Moody's Rating
Royal Bank of Canada (UK)	14.15%	AA-	AA	A1
State Street Bank London	12.05%	A	AA-	A1
JP Morgan Chase Bank N.A. London	10.02%	A+	AA	Aa3
HSBC Bank PLC	8.67%	A	AA-	A2
Toronto Dominion Bank	6.82%	AA-	AA-	Aa2
National Australia Bank Limited	6.68%	AA-	AA-	Aa3
UBS AG	5.69%	A+	AA-	Aa3
JP Morgan Chase Bank N.A.	5.04%	A+	AA	Aa3
Citibank N.A.	4.69%	A+	A+	A1
Royal Bank of Scotland PLC	4.11%	BBB+	BBB+	Baa2
Morgan Stanley LCH	3.34%	BBB+	A	A3
State Street Bank and Trust Company	2.86%	AA-	AA	Aa3
Westpac Banking Corporation	2.54%	AA-	AA-	Aa3
Standard Chartered Bank	2.30%	A	A+	A1
Australia and New Zealand Banking Group	2.24%	AA-	AA-	Aa3
Barclays Bank ICE	1.19%	A	A	A2
HSBC Bank USA	0.82%	AA-	AA-	Aa3
Goldman Sachs International	0.75%	A+	A	A1
Barclays Bank PLC Wholesale	0.70%	A	A	A2
Bank of Montreal	0.68%	A+	AA-	A1
Commonwealth Bank of Australia Sydney	0.67%	AA-	AA-	Aa3
JP Morgan CME	0.66%	A-	AA-	A3
Royal Bank of Canada	0.66%	AA-	AA	A1
Credit Suisse International	0.63%	A	A	A1
Bank of New York	0.43%	A	AA-	A1
Deutsche Bank AG	0.41%	BBB+	BBB+	Baa2
Morgan Stanley Co Incorporated	0.38%	BBB+	A	A3
Citigroup Global Markets CME	0.33%	BBB+	A	Baa1
Barclays Bank CME	0.12%	A	A	A2
Brown Brothers Harriman & Co.	0.10%	NR	A+	NR
Citigroup	0.08%	BBB+	A	Baa1
Morgan Stanley ICE	0.08%	BBB+	A	A3
Goldman Sachs & Co. LLC	0.05%	BBB+	A	A3
JP Morgan	0.03%	A-	AA-	A3
JP Morgan LCH	0.03%	A-	AA-	A3
	100.00%			

TABLE 18

Derivative Instruments Subject to Interest Rate Risk as of June 30, 2018

Investment Type	Fair Value	Investment Maturities (in years) Less Than 1	1 - 5	6 - 10	More than 10
Credit Default Swaps Bought	$ (31,679)	$ –	$ –	$ –	$ (31,679)
Credit Default Swaps Written	(2,582,429)	–	1,548,712	41,207	(4,172,348)
Fixed Income Options Bought	4,584,176	1,872,962	2,206,314	504,900	–
Fixed Income Options Written	(4,954,924)	(1,403,141)	(3,551,783)	–	–
Pay Fixed Interest Rate Swaps	5,046,367	–	(21,707)	5,006,227	61,847
Receive Fixed Interest Rate Swaps	(3,931,348)	–	(4,071,883)	100,822	39,713
Total Return Swaps Bond	339,486	339,486	–	–	–
Total Return Swaps Equity	(1,520,576)	(1,520,576)	–	–	–
Total	**$ (3,050,927)**	**$ (711,269)**	**$ (3,890,347)**	**$ 5,653,156**	**$ (4,102,467)**

TABLE 19

Derivative Instruments Highly Sensitive to Interest Rate Changes as of June 30, 2018

Investment Type	Reference Rate	Fair Value	Notional Value
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.46000%	$ 207,709	$ 2,004,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.25900%	704,056	16,480,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.48800%	116,347	4,520,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.65700%	493,339	5,280,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month SEK LIBOR, Pay Variable 3-month SEK LIBOR	–	15,171,026
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.75000%	411,731	11,385,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.27400%	85,887	6,850,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.17881%	81,350	4,440,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.17881%	82,397	4,385,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.60100%	104,307	3,500,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.59300%	42,837	1,400,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.71622%	215,938	87,550,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.79750%	127,524	9,370,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.25000%	8,208	570,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.25000%	29,254	2,100,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.06000%	160,471	6,256,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.95000%	142,338	17,704,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.45850%	3,288	3,075,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.45348%	4,261	3,090,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 1.37000%	(189,321)	5,452,461
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.96400%	5,285	7,100,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month FEDL, Pay Fixed 2.45274%	3,853	2,705,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.96200%	5,452	7,050,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.86950%	35,611	26,290,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.25000%	3,053,160	51,555,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.98100%	4,098	13,540,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.85100%	16,993	7,250,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.88650%	1,483	240,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro LIBOR, Pay Fixed 0.14850%	(84,337)	91,722,768
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro LIBOR, Pay Fixed 0.14950%	(10,325)	11,453,670
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro LIBOR, Pay Fixed 0.14750%	(35,836)	38,225,604
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.04700%	(541)	540,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.08150%	(8,880)	5,410,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.06100%	(6,567)	4,770,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.20350%	(21,111)	5,400,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.16500%	(217,616)	13,600,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.20000%	(239,070)	6,520,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.87000%	12,252	5,500,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.85500%	20,315	7,840,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.82100%	17,261	5,310,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.89350%	22,762	12,110,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.97100%	2,170	5,295,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.99300%	3	5,275,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.01250%	(1,952)	5,280,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.98650%	654	5,275,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.98100%	177	760,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.03600%	(4,214)	5,280,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.02700%	(3,025)	4,820,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.05800%	(6,383)	5,270,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.12646%	(63,831)	2,750,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro LIBOR, Pay Fixed 0.11500%	(169,290)	128,757,469
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.05600%	(6,151)	5,270,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.12400%	(12,874)	5,280,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.10950%	(11,423)	5,280,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.08100%	(4,611)	2,720,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.08200%	(4,661)	2,720,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month Austrailian BBSW, Pay Fixed 2.11750%	(68,663)	93,405,396
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.04900%	(3,050)	2,730,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 3.04150%	(2,672)	2,730,000
Subtotal - Pay Fixed Interest Rate Swaps		5,046,367	823,612,394

TABLE 19 continues on the next page

TABLE 19 continuing from the previous page

Investment Type	Reference Rate	Fair Value	Notional Value
Receive Fixed Interest Rate Swaps	Receive Fixed 0.34125%, Pay Variable 3-month Swedish STIBOR	93,778	15,171,026
Receive Fixed Interest Rate Swaps	Receive Fixed 2.93600%, Pay Variable 3-month New Zealand BBR	384,731	18,615,487
Receive Fixed Interest Rate Swaps	Receive Fixed 2.25000%, Pay Variable 3-month LIBOR	(999,396)	42,237,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.66039%, Pay Variable 3-month LIBOR	(295,524)	85,500,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.08000%, Pay Variable 3-month LIBOR	39,713	1,910,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.79550%, Pay Variable 3-month LIBOR	(7,937)	1,800,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.59300%, Pay Variable 3-month LIBOR	(31,399)	25,660,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.70550%, Pay Variable 3-month LIBOR	(80,057)	9,460,000
Receive Fixed Interest Rate Swaps	Receive Fixed 7.35050%, Pay Variable 1-month Mexican TIIE	(1,040,899)	63,480,152
Receive Fixed Interest Rate Swaps	Receive Fixed 0.14850%, Pay Variable 6-month Euro LIBOR	–	91,722,768
Receive Fixed Interest Rate Swaps	Receive Fixed 0.14950%, Pay Variable 6-month Euro LIBOR	–	11,453,670
Receive Fixed Interest Rate Swaps	Receive Fixed 0.14750%, Pay Variable 6-month Euro LIBOR	–	38,225,604
Receive Fixed Interest Rate Swaps	Receive Fixed 7.33000%, Pay Variable 1-month Mexican TIIE	(836,926)	43,524,160
Receive Fixed Interest Rate Swaps	Receive Fixed 2.85000%, Pay Variable 3-month LIBOR	(152,222)	106,950,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00750%, Pay Variable 6-month EURIBOR	13,348	934,040
Receive Fixed Interest Rate Swaps	Receive Fixed 2.94500%, Pay Variable 3-month LIBOR	25,734	12,160,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.97500%, Pay Variable 3-month LIBOR	(1,638)	5,290,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.80500%, Pay Variable 3-month LIBOR	(38,872)	11,250,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.82000%, Pay Variable 3-month LIBOR	(33,776)	10,650,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.79700%, Pay Variable 3-month LIBOR	(19,188)	5,320,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.88700%, Pay Variable 3-month LIBOR	(10,109)	5,310,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.75900%, Pay Variable 3-month LIBOR	(41,484)	9,590,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.87900%, Pay Variable 3-month LIBOR	(10,913)	5,310,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.86750%, Pay Variable 6-month EURIBOR	42	1,027,444
Receive Fixed Interest Rate Swaps	Receive Fixed 2.00000%, Pay Variable 3-month LIBOR	(857,338)	57,800,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.11500%, Pay Variable 6-month Euro LIBOR	–	128,757,469
Receive Fixed Interest Rate Swaps	Receive Fixed 3.01250%, Pay Variable 3-month LIBOR	1,119	3,210,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.99950%, Pay Variable 3-month LIBOR	329	3,100,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.05900%, Pay Variable 3-month LIBOR	3,181	2,645,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.55556%, Pay Variable 12-month FEDL	13,559	2,757,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.50500%, Pay Variable 12-month FEDL	6,549	3,640,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.01200%, Pay Variable 3-month LIBOR	795	2,645,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.01550%, Pay Variable 3-month LIBOR	1,944	5,300,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.37750%, Pay Variable 6-month Norwegian NIBOR	(124,848)	176,839,174
Receive Fixed Interest Rate Swaps	Receive Fixed 2.55556%, Pay Variable 12-month FEDL	16,354	6,482,705
Receive Fixed Interest Rate Swaps	Receive Fixed 2.52893%, Pay Variable 12-month FEDL	21,380	6,527,521
Receive Fixed Interest Rate Swaps	Receive Fixed 2.53460%, Pay Variable 12-month FEDL	29,589	8,162,774
Receive Fixed Interest Rate Swaps	Receive Fixed 3.00500%, Pay Variable 3-month LIBOR	784	5,290,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.01300%, Pay Variable 3-month LIBOR	2,485	8,290,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.95150%, Pay Variable 3-month LIBOR	(2,337)	2,650,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.96400%, Pay Variable 3-month LIBOR	(1,710)	2,650,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.97850%, Pay Variable 3-month LIBOR	(189)	510,000
Subtotal - Receive Fixed Interest Rate Swaps		(3,931,348)	1,049,807,994
Total Interest Rate Swaps		**$ 1,115,019**	**$ 1,873,420,388**

TABLE 20

Derivative Instruments Subject to Foreign Currency Risk as of June 30, 2018

Currency Name	Currency Forward Contracts: Net Receivables	Currency Forward Contracts: Net Payables	Options/Rights/ Warrants	Swaps	Total Exposure
Argentine peso	$ (1,590,946)	$ 110,993	$ –	$ –	$ (1,479,953)
Australian dollar	(2,330,007)	4,092,198	1,291	(68,663)	1,694,819
Brazilian real	(1,870,914)	93,592	–	–	(1,777,322)
Canadian dollar	(3,147,822)	2,458,869	–	–	(688,953)
Danish krone	(9,782)	1,278,854	–	–	1,269,072
Euro	(4,282,964)	25,648,905	1,366,075	(595,947)	22,136,069
Hong Kong dollar	(4,080)	80,962	222	(94,851)	(17,747)
Indian rupee	(140,375)	89,428	–	–	(50,947)
Japanese yen	(6,312,775)	15,928,432	86,237	(1,031,285)	8,670,609
Malaysian ringgit	–	–	1,699	–	1,699
Mexican peso	141,186	123,204	–	(1,877,825)	(1,613,435)
New Israeli sheqel	(1,111,306)	3,538,934	–	–	2,427,628
New Taiwan dollar	(155,100)	155,898	–	–	798
New Zealand dollar	(8,254,026)	4,449,045	9,194	384,731	(3,411,056)
Norwegian krone	(3,707,609)	929,197	–	(124,849)	(2,903,261)
Polish zloty	(238,012)	126,695	–	–	(111,317)
Pound sterling	(4,717,201)	19,148,563	1,813,306	707	16,245,375
Russian ruble	121,509	–	–	–	121,509
Singapore dollar	(1,107,327)	3,581,283	–	(48)	2,473,908
South African rand	(689,423)	19,847	–	–	(669,576)
South Korean won	(558,979)	901,470	–	–	342,491
Swedish krona	(4,602,780)	9,897,380	–	235,681	5,530,281
Swiss franc	(377,970)	11,087,230	1,064	(77,288)	10,633,036
Thailand baht	–	–	10,537	–	10,537
Tunisian dinar	–	–	13	–	13
Turkish lira	(295,073)	(290,176)	–	–	(585,249)
Yuan renminbi	(420,986)	1,029,444	–	–	608,458
Yuan renminbi - Offshore	(6,245)	92,500	–	–	86,255
Total Subject to Foreign Currency Risk	**(45,669,007)**	**104,572,747**	**3,289,638**	**(3,249,637)**	**58,943,741**
U.S. dollar	–	–	15,752,565	569,458	16,322,023
Total	**$ (45,669,007)**	**$ 104,572,747**	**$ 19,042,203**	**$ (2,680,179)**	**$ 75,265,764**

presents a summary of derivative instruments subject to foreign currency risk as of June 30, 2018.

Note 5 - Capital Assets Used in Plan Operations

Capital construction of PERS' headquarters in Tigard, Oregon, was completed May 31, 1997. The land, building, and improvements are recorded at cost. The depreciation of the building and improvements is computed on the straight-line method over the estimated useful life of 40 years.

Data processing hardware, furniture, and equipment are recorded at cost. These are items that are not consumed in the normal course of operations, have a useful life of more than one year, and whose value is $5,000 or more.

Depreciation is computed using the straight-line method over the assets' estimated useful lives. Useful lives range from three to 10 years.

Data processing software generated internally as part of the Oregon Retirement Information On-line Network (ORION) project is recorded at cost. The useful life is amortized using the straight-line method over 20 years. See Table 21 below.

TABLE 21

Schedule of Changes in Capital Assets for the year ended June 30, 2018

	Beginning of Year	Increases	Decreases	End of Year
Capital assets, not being depreciated or amortized:				
Land	$ 944,463	$ –	$ –	$ 944,463
Total capital assets, not being depreciated or amortized	944,463	–	–	944,463
Capital assets, being depreciated or amortized:				
Furniture and Equipment	1,185,715	50,798	–	1,236,513
Data Processing Software	40,395,201	–	–	40,395,201
Data Processing Hardware	1,834,829	293,602	–	2,128,431
Building and Building Improvements	8,691,997	–	–	8,691,997
Total capital assets being depreciated or amortized	52,107,742	344,400	–	52,452,142
Less accumulated depreciation or amortization for:				
Furniture and Equipment	(806,010)	(210,925)	–	(1,016,935)
Data Processing Software	(17,264,684)	(1,923,910)	–	(19,188,594)
Data Processing Hardware	(1,195,316)	(344,712)	–	(1,540,028)
Building and Building Improvements	(4,089,805)	(289,659)	–	(4,379,464)
Total accumulated depreciation or amortization	(23,355,815)	(2,769,206)	–	(26,125,021)
Total capital assets, being depreciated or amortized, net	28,751,927	(2,424,806)	–	26,327,121
Capital assets, net	**$ 29,696,390**	**$ (2,424,806)**	**$ –**	**$ 27,271,584**

Depreciation expense	Amount
Defined Benefit Pension Plan Depreciation	$ 2,728,799
Oregon Public Service Retirement Plan Individual Account Program Depreciation	40,407
Total depreciation expense	**$ 2,769,206**

Note 6 - Reserves and Designations

In accordance with the following plan requirements, various funds have been established to account for reserves or designations held for future and current payments:

Chapter 238 Defined Benefit Plan

Table 22 below details the amounts comprising the total Net Position Restricted for Pension Benefits.

A. Member Reserve

The Member Reserve represents member contributions made through December 31, 2003, and earnings allocations less refunds and amounts transferred to reserves for retirements and disabilities.

B. Employer Contribution Designation

The Employer Contribution Designation represents employer contributions and earnings allocations less amounts transferred to reserves for retirements and disabilities.

C. Benefit Reserve

The Benefit Reserve is the amount set aside to pay future benefits. It includes funds transferred from the individual member and employer accounts and earnings allocations less amounts paid for retirements and disabilities.

D. Tier One Rate Guarantee Reserve

The Tier One Rate Guarantee Reserve may be credited with investment earnings in excess of the required Tier One assumed earnings rate guarantee. ORS 238.255(1) requires regular accounts for Tier One members to be credited at the assumed rate of return on investments adopted by the Board for use in actuarial valuations.

The regular account for Tier One members and alternate payees of those members cannot be credited with earnings in excess of the assumed interest rate until:

(a) the reserve is fully funded with amounts determined by the Board, after consultation with the actuary employed by the Board, necessary to ensure a zero balance in the reserve when all Tier One members and alternate payees of those members have retired; and

(b) the reserve has been fully funded as described in paragraph (a) of this subsection in each of the three immediately preceding calendar years.

E. Contingency Reserve

The Contingency Reserve is to be maintained and used by the Board to prevent any deficit of moneys available for the payment of retirement allowances due to interest fluctuations, changes in mortality rates, or other unforeseen contingency.

F. Employer Contingency Reserve

The Employer Contingency Reserve was established by the Board to prevent any deficit in the fund caused by the insolvency of an employer. Only earnings on employer contributions fund this reserve.

G. Unallocated Earnings Designation

The Unallocated Earnings Designation represents January through June investment earnings or losses less administrative expenses, which will be credited on a calendar year basis. Crediting takes place in March of the following year after employer annual reports have been reconciled and contributions have been posted to individual member and employer accounts.

TABLE 22

Reserves and Designations		**Defined Benefit Pension Plan**
Chapter 238 Defined Benefit Plan and Employee Benefit Plan		
Member Reserve	$	3,994,510,571
Employer Contribution Designation		25,821,453,579
Benefit Reserve		19,350,321,906
Tier One Rate Guarantee Reserve		448,776,254
Contingency Reserve		47,500,000
Employer Contingency Reserve		2,500,000
Unallocated Earnings Allocation		15,083,721,302
OPSRP Defined Benefit Program		4,578,716,833
Net Position Restricted for Pension Benefits	**$**	**69,327,500,445**

H. OPSRP Defined Benefit Program

OPSRP Defined Benefit Program reserve represents the program's accumulation of employer contributions and investment earnings less benefits and administrative expenses.

Other Postemployment Benefits Plans

I. Retirement Health Insurance Account (RHIA)

The RHIA plan fiduciary net position balance represents the program's accumulation of employer contributions and investment earnings less premium subsidies and administrative expenses. As of June 30, 2018, the balance of this account was $576.9 million. The Internal Revenue Code limits employer contributions to a 401(h) account to a maximum of 25 percent of the employer's normal cost contributions to the pension plan.

J. Retiree Health Insurance Premium Account (RHIPA)

The RHIPA plan fiduciary net position balance represents the program's accumulation of employer contributions and investment earnings less premium subsidies and administrative expenses. As of June 30, 2018, the balance of this account was $35.0 million. The Internal Revenue Code limits employer contributions to a 401(h) account to a maximum of 25 percent of the employer's normal cost contributions to the pension plan.

Other Plans

K. Deferred Compensation Plan

The Deferred Compensation plan fiduciary net position balance represents the program's accumulation of plan member contributions and investment earnings less benefits paid and administrative expenses. As of June 30, 2018, the balance of this account was $1,956.1 million. The Internal Revenue Code (IRC) limits plan member contributions to an IRC 457 account to a maximum of $18,500 (for calendar year 2018), with optional catch up provisions available to members over age 50.

Enterprise Fund

L. Standard Retiree Health Insurance Account (SRHIA)

The SRHIA net position balance represents the program's accumulation of retiree insurance premiums, reinsurance reimbursements, and interest earnings less insurance claims and administrative expenses. As of June 30, 2018, the balance of this account was $72.6 million.

Note 7 - Litigation

PERS is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, in the opinion of the System's legal counsel, the resolution of these matters will not have a material adverse effect on the financial condition of the System.

Note 8 - Standard Retiree Health Insurance Account

A. Basis for Estimated Liabilities

The Standard Retiree Health Insurance Account (SRHIA) establishes claim liabilities based on estimates of the ultimate costs of claims (including future claim adjustment expenses) that have been reported but not settled and of claims that have been "incurred but not reported" (IBNR). Table 23 below shows the changes in the aggregated estimated claims liabilities for the years ended June 30, 2018 and 2017.

The estimated claims liability was calculated by Butler, Partners, & Associates, PERS' health insurance consultant, at June 30, 2018, using a variety of mathematical and statistical techniques and adjusted for actual experience to produce current estimates that reflect recent settlements, claim frequency, and other economic and social factors. Adjustments to claims liabilities are charged or credited to expense in the periods in which they are made. The estimated claims liability of $9.2 million is carried at its face amount, and no interest discount is assumed. The "IBNR" represents an estimate for claims that have been incurred prior to June 30, 2018, but have not been reported to the SRHIA.

Note 9 - Employers' Net Pension Liability

Actuarial Cost Method and Assumptions

The components of the net pension liability of the defined benefit pension plan are shown in Table 24 on page 69.

The actuarial valuation calculations are based on

TABLE 23

Changes in the Aggregated Estimated Claims Liabilities of SRHIA
For the Year Ended June 30,

	2018	2017
Total Estimated Claims at Beginning of Fiscal Year	$ 8,700,000	$ 9,200,000
Insured Claims and Claim Adjustment Expenses		
Provision for Insured Events of Current Fiscal Year	133,490,060	126,411,220
Increase/(Decrease) in Provision for Insured Events of Prior Years	9,446,888	6,689,450
Total Incurred Claims and Claim Adjustment Expenses	142,936,948	133,100,670
Payments		
Claims and Claim Adjustment Expenses Attributable to Insured Events of Current Fiscal Year	124,290,060	117,711,220
Claims and Claim Adjustment Expenses Attributable to Insured Events of Prior Fiscal Year	18,146,888	15,889,450
Total Payments	142,436,948	133,600,670
Total Estimated Claims at End of Fiscal Year	**$ 9,200,000**	**$ 8,700,000**

the benefits provided under the terms of the plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members. The December 31, 2016 Actuarial Valuation was used to develop the GASB 67 financial reporting results for the Defined Benefit Pension Plan as of June 30, 2018.

Key actuarial methods and assumptions used to measure the total pension liability are illustrated in Table 25 on page 69.

Discount Rate

The discount rate used to measure the total pension liability was 7.20 percent for the Defined Benefit Pension Plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and those of the contributing employers are made at the contractually required rates, as actuarially determined. 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 on pension plan investments for the Defined Benefit Pension Plan was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity Analysis

Table 26 on page 69 presents the net pension liability calculated using the discount rate of 7.20 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is one percent lower (6.20 percent) or one percent higher (8.20 percent) than the current rate. The results of actuarial valuations used for rate setting and the related Schedules of Funding Progress may be found in the Actuarial Section beginning on page 102.

Long-Term Expected Rate of Return

To develop an analytical basis for the selection of the long-term expected rate of return assumption, in July 2015 the PERS Board reviewed long-term assumptions developed by both Milliman's capital market assumptions team and the Oregon Investment Council's (OIC) investment advisors. Table 31 on page 72 shows Milliman's assumptions for each of the asset classes in which the plan was invested at that time based on the OIC long-term target asset allocation. The OIC's description of each asset class was used to map the target allocation to the asset classes shown on page 72 . Each asset class assumption is based on a consistent set of underlying assumptions, and includes adjustment for the inflation assumption. These assumptions are not based on historical returns, but instead are based on a forward-looking capital market economic model.

Depletion Date Projection

GASB 67 generally requires that a blended discount rate be used to measure the Total Pension Liability (the Actuarial Accrued Liability calculated using the Individual Entry Age Normal Cost Method). The long-term expected return on plan investments may be used to discount liabilities to the extent that the plan's Fiduciary Net Position (fair market value of assets) is projected to cover benefit payments and administrative expenses. A 20-year high quality (AA/Aa or higher) municipal bond rate must be used for periods where the Fiduciary Net Position is not projected to cover benefit payments and administrative expenses. Determining the discount rate under GASB 67 will often require that the actuary perform complex projections of future benefit payments and asset values. GASB 67 (paragraph 43) does allow for alternative evaluations of projected solvency, if such evaluation can reliably be made. GASB does not contemplate a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

The following circumstances justify an alternative evaluation of sufficiency for Oregon PERS:

- Oregon PERS has a formal written policy to calculate an Actuarially Determined Contribution (ADC), which is articulated in the actuarial valuation report.
- The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will bring the plan to a 100 percent funded position by the end of the amortization period if future experience follows assumption.
- GASB 67 specifies that the projections regarding future solvency assume that plan assets earn the assumed rate of return and there are no future changes in the plan provisions or actuarial methods and assumptions, which means that the projections would not reflect any adverse future experience which might impact the plan's funded position.

Based on these circumstances, it is our third-party actuary's opinion that the detailed depletion date projections outlined in GASB 67 would clearly indicate that the Fiduciary Net Position is always projected to be sufficient to cover benefit payments and administrative expenses.

Note 10 - Employers' Net OPEB Liability/ (Asset)

Actuarial Cost Method and Assumptions

The components of the Net OPEB liability (asset) for the OPEB plans are shown in Table 27 on page 71.

The actuarial valuation calculations are based on the benefits provided under the terms of the plan in

TABLE 24

Net Pension Liability (in Millions)
As of June 30,

		2018		2017
Total Pension Liability	$	84,476.1	$	79,851.7
Plan Fiduciary Net Position		69,327.5		66,371.7
Employers' Net Pension Liability	**$**	15,148.6	**$**	13,480.0
Plan net position as a percentage of total pension liability		82.1 %		83.1 %

TABLE 25

Actuarial Methods and Assumptions

	Pension
Valuation date	December 31, 2016
Measurement date	June 30, 2018
Experience Study	2016, published July 26, 2017
Actuarial assumptions:	
Actuarial cost method	Entry Age Normal
Inflation rate	2.50 percent
Long-term expected rate of return	7.20 percent
Discount rate	7.20 percent
Projected salary increases	3.50 percent
Cost of living adjustments (COLA)	Blend of 2.00% COLA and graded COLA (1.25%/0.15%) in accordance with *Moro* decision; blend based on service.
Mortality	***Healthy retirees and beneficiaries:*** RP-2014 Healthy annuitant, sex-distinct, generational with Unisex, Social Security Data Scale, with collar adjustments and set-backs as described in the valuation. ***Active members:*** RP-2014 Employees, sex-distinct, generational with Unisex, Social Security Data Scale, with collar adjustments and set-backs as described in the valuation. ***Disabled retirees:*** RP-2014 Disabled retirees, sex-distinct, generational with Unisex, Social Security Data Scale.

TABLE 26

Sensitivity of Net Pension Liability to Changes in the Discount Rate (in Millions)
As of June 30, 2018

Employers' Net Pension Liability		**1% Decrease (6.20 %)**		**Current Discount Rate (7.20%)**		**1% Increase (8.20 %)**
Defined Benefit Pension Plan	$	25,316.3	$	15,148.6	$	6,756.1

effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members as of the December 31, 2016 valuation rolled forward to June 30, 2018.

Key actuarial methods and assumptions used to measure the total OPEB liability are illustrated in Table 28 on page 71.

Discount Rate

The discount rate used to measure the total OPEB liability was 7.20 percent for the OPEB Plans. The projection of cash flows used to determine the discount rate assumed that contributions from contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the OPEB plans' 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 on OPEB plan investments for the OPEB Plans was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity Analysis

Table 29 on page 71 presents the net OPEB liability/(asset) calculated using the discount rate of 7.20 percent, as well as what the net OPEB liability/(asset) would be if it were calculated using a discount rate that is one percent lower (6.20 percent) or one percent higher (8.20 percent) than the current rate. The results of actuarial valuations used for rate setting and the related Schedules of Funding Progress may be found in the Actuarial Section beginning on page 102.

Table 30 on page 72 presents the net OPEB liability /(asset) calculated using the current healthcare cost trend rates, as well as what the net OPEB liability/(asset) would be if it were calculated using healthcare trend rates that are one percentage point lower, or one percentage point higher than the current rates.

Long-Term Expected Rate of Return

To develop an analytical basis for the selection of the long-term expected rate of return assumption, in July 2015 the PERS Board reviewed long-term assumptions developed by both Milliman's capital market assumptions team and the Oregon Investment Council's (OIC) investment advisors. Table 31 on page 72 shows Milliman's assumptions for each of the asset classes in which the plans were invested at that time based on the OIC long-term target asset allocation. The OIC's description of each asset class was used to map the target allocation to the asset classes shown on page 72. Each asset class assumption is based on a consistent set of underlying assumptions, and includes adjustment for the inflation assumption. These assumptions are not based on historical returns, but instead are based on a forward-looking capital market economic model.

Depletion Date Projection

GASB 74 generally requires that a blended discount rate be used to measure the Total OPEB Liability (the Actuarial Accrued Liability calculated using the Individual Entry Age Normal Cost Method). The long-term expected return on plan investments may be used to discount liabilities to the extent that the plan's Fiduciary Net Position (fair market value of assets) is projected to cover benefit payments and administrative expenses. A 20-year high quality (AA/Aa or higher) municipal bond rate must be used for periods where the Fiduciary Net Position is not projected to cover benefit payments and administrative expenses. Determining the discount rate under GASB 74 will often require that the actuary perform complex projections of future benefit payments and asset values. GASB 74 (paragraph 51) does allow for alternative evaluations of projected solvency, if such evaluation can reliably be made. GASB does not contemplate a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

The following circumstances justify an alternative evaluation of sufficiency for Oregon PERS:

- Oregon PERS has a formal written policy to calculate an Actuarially Determined Contribution (ADC), which is articulated in the actuarial valuation report.
- The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will bring the plan to a 100 percent funded position by the end of the amortization period if future experience follows assumption.
- GASB 74 specifies that the projections regarding future solvency assume that plan assets earn the assumed rate of return and there are no future changes in the plan provisions or actuarial methods and assumptions, which means that the projections would not reflect any adverse future experience which might impact the plan's funded position.

Based on these circumstances, it is our third-party actuary's opinion that the detailed depletion date projections outlined in GASB 74 would clearly indicate that the Fiduciary Net Position is always projected to be sufficient to cover benefit payments and administrative expenses.

TABLE 27

Net OPEB - RHIA (Asset) (in Millions)
As of June 30, 2018

		2018
Total OPEB - RHIA Liability	$	465.2
Plan Fiduciary Net Position		576.8
Employers' Net OPEB - RHIA (Asset)	**$**	**(111.6)**
Plan net position as a percentage of Total OPEB - RHIA Liability		124.0 %

Net OPEB - RHIPA Liability (in Millions)
As of June 30, 2018

		2018
Total OPEB - RHIPA Liability	$	70.3
Plan Fiduciary Net Position		35.0
Employer's Net OPEB - RHIPA Liability	**$**	**35.3**
Plan net position as a percentage of Total OPEB - RHIPA Liability		49.8 %

TABLE 28

Actuarial Methods and Assumptions

	RHIA	RHIPA
Valuation date	December 31, 2016	December 31, 2016
Measurement date	June 30, 2018	June 30, 2018
Experience Study	2016, published July 26, 2017	2016, published July 26, 2017
Actuarial assumptions:		
Actuarial cost method	Entry Age Normal	Entry Age Normal
Inflation rate	2.50 percent	2.50 percent
Long-term expected rate of return	7.20 percent	7.20 percent
Discount rate	7.20 percent	7.20 percent
Projected salary increases	3.50 percent	3.50 percent
Retiree healthcare participation	Healthy retirees: 38%; Disabled retirees: 20%	Healthy retirees: 38%; Disabled retirees: 20%
Healthcare cost trend rate	Not applicable	Applied at beginning of plan year, starting with 6.5% for 2018, decreasing to 5.9% for 2019, increasing to 6.2% for 2029, and decreasing to an ultimate rate of 4.2% for 2093 and beyond.
Mortality	***Healthy retirees and beneficiaries:*** RP-2000 Sex-distinct, generational per Scale BB, with collar adjustments and set-backs as described in the valuation. ***Active members:*** Mortality rates are a percentage of healthy retiree rates that vary by group, as described in the valuation. ***Disabled retirees:*** Mortality rates are a percentage (70% for males, 95% for females) of the RP-2000 Sex-distinct, generational per Scale BB, disabled mortality table.	***Healthy retirees and beneficiaries:*** RP-2014 Healthy annuitant, sex-distinct, generational with Unisex, Social Security Data Scale, with collar adjustments and set-backs as described in the valuation. ***Active members:*** RP-2014 Employees, sex-distinct, generational with Unisex, Social Security Data Scale, with collar adjustments and set-backs as described in the valuation. ***Disabled retirees:*** RP-2014 Disabled retirees, sex-distinct, generational with Unisex, Social Security Data Scale.

TABLE 29

Sensitivity of Net OPEB Liability/(Asset) to Changes in the Discount Rate (in Millions)
As of June 30, 2018

Employers' Net OPEB Liability/(Asset)	**1% Decrease (6.20 %)**	**Current Discount Rate (7.20%)**	**1% Increase (8.20 %)**
Other Postemployment Benefit Plan - RHIA	$ (65.0)	$ (111.6)	$ (151.3)
Other Postemployment Benefit Plan - RHIPA	$ 39.6	$ 35.3	$ 30.4

TABLE 30

Sensitivity of Net OPEB Liability/(Asset) to Changes in the Healthcare Cost Trend Rate (in Millions)
As of June 30, 2018

Employers' Net OPEB Liability/(Asset)	1% Decrease	Current Trend Rate	1% Increase
Other Postemployment Benefit Plan - RHIA	$ (111.6)	$ (111.6)	$ (111.6)
Other Postemployment Benefit Plan - RHIPA	$ 28.6	$ 35.3	$ 41.9

TABLE 31

Long-Term Expected Rate of Return Asset Class	Target Allocation*	Annual Arithmetic Return	Compound Annual (Geometric) Return	Standard Deviation
Core Fixed Income	8.00 %	3.59 %	3.49 %	4.55 %
Short-Term Bonds	8.00	3.42	3.38	2.70
Bank/Leveraged Loans	3.00	5.34	5.09	7.50
High Yield Bonds	1.00	6.90	6.45	10.00
Large/Mid Cap US Equities	15.75	7.45	6.30	16.25
Small Cap US Equities	1.31	8.49	6.69	20.55
Micro Cap US Equities	1.31	9.01	6.80	22.90
Developed Foreign Equities	13.13	8.21	6.71	18.70
Emerging Market Equities	4.13	10.53	7.45	27.35
Non-US Small Cap Equities	1.88	8.67	7.01	19.75
Private Equity	17.50	11.45	7.82	30.00
Real Estate (Property)	10.00	6.15	5.51	12.00
Real Estate (REITS)	2.50	8.26	6.37	21.00
Hedge Fund of Funds - Diversified	2.50	4.36	4.09	7.80
Hedge Fund - Event-driven	0.63	6.21	5.86	8.90
Timber	1.88	6.37	5.62	13.00
Farmland	1.88	6.90	6.15	13.00
Infrastructure	3.75	7.54	6.60	14.65
Commodities	1.88	5.43	3.84	18.95
Assumed Inflation - Mean			2.50 %	1.85 %

* Based on the OIC Statement of Investment Objectives and Policy Framework for the Oregon Public Employees Retirement Fund, revised as of June 7, 2017.

Required Supplementary Information

Required Supplementary Information
Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios (Unaudited)
Defined Benefit Pension Plan
For the Fiscal Year Ended June 30,[1]
(amounts in millions)

	2018	2017	2016	2015	2014
Total Pension Liability [2]					
Service Cost	$ 1,108.2	$ 1,105.5	$ 1,016.8	$ 960.9	$ 1,020.3
Interest on Total Pension Liability	5,858.2	5,662.2	5,355.3	4,779.5	4,819.4
Changes in Benefit Terms	–	–	–	5,353.5	(2,423.6)
Changes in Assumptions	2,240.3	–	3,946.4	–	–
Differences Between Expected and Actual Experience	74.3	351.8	317.3	380.0	–
Benefit Payments	(4,656.6)	(4,362.2)	(4,206.5)	(3,943.6)	(3,863.4)
Net Change in Total Pension Liability	4,624.4	2,757.3	6,429.3	7,530.3	(447.3)
Total Pension Liability - Beginning	79,851.7	77,094.4	70,665.1	63,134.8	63,582.1
Total Pension Liability - Ending	$ 84,476.1	$ 79,851.7	$ 77,094.4	$ 70,665.1	$ 63,134.8
Plan Fiduciary Net Position					
Employer Contributions	$ 1,390.1	$ 1,022.2	$ 977.3	$ 1,123.3	$ 915.2
Member Contributions	12.6	13.1	14.2	13.8	15.3
Net Investment and Other Income	6,247.5	7,660.0	413.9	2,364.5	9,886.6
Benefit Payments	(4,642.7)	(4,346.2)	(4,193.3)	(3,927.2)	(3,837.8)
Refunds of Contributions	(13.9)	(16.0)	(13.1)	(16.5)	(25.6)
Administrative Expense	(37.8)	(43.5)	(40.5)	(35.7)	(31.2)
Net Change in Plan Fiduciary Net Position	2,955.8	4,289.6	(2,841.5)	(477.8)	6,922.5
Plan Fiduciary Net Position - Beginning	66,371.7	62,082.1	64,923.6	65,401.4	58,478.9
Plan Fiduciary Net Position - Ending	$ 69,327.5	$ 66,371.7	$ 62,082.1	$ 64,923.6	$ 65,401.4
Net Pension Liability/(Asset)	$ 15,148.6	$ 13,480.0	$ 15,012.3	$ 5,741.5	$ (2,266.6)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability/(Asset)	82.1 %	83.1 %	80.5 %	91.9 %	103.6 %
Covered Payroll	$ 10,044.0	$ 10,037.5	$ 9,428.4	$ 9,000.2	$ 8,701.7
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	150.8 %	134.3 %	159.2 %	63.8 %	(26.0) %

[1] 10-year trend information will be disclosed prospectively
[2] See Table 25 for Actuarial Methods and Assumptions

Changes in Benefit Terms and Assumptions:
Benefit Terms: The 2013 Oregon Legislature made a series of changes to PERS that lowered projected future benefit payments from the System. These changes included reductions to future Cost of Living Adjustments (COLA) made through Senate Bills 822 and 861. Senate Bill 822 also required the contribution rates scheduled to be in effect from July 2013 to June 2015 to be reduced. The Oregon Supreme Court decision in Moro v. State of Oregon, issued on April 30, 2015, reversed a significant portion of the reductions the 2013 Oregon Legislature made to future System Cost of Living Adjustments (COLA) through Senate Bills 822 and 861. This reversal increased the total pension liability as of June 30, 2015 compared to June 30, 2014 total pension liability.

Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2016 total pension liability and June 30, 2018 total pension liability. For June 30, 2016, the changes included the lowering of the long-term expected rate of return to 7.50 percent and lowering of the assumed inflation to 2.50 percent. For June 30, 2018, the long-term expected rate of return was lowered to 7.20 percent. In addition, the healthy mortality assumption was changed to reflect an updated mortality improvement scale for all groups, and assumptions were updated for merit increases, unused sick leave, and vacation pay were updated.

Required Supplementary Information
Schedule of Investment Returns (Unaudited)
Defined Benefit Pension Plan
For the Fiscal Year Ended June 30[1]

	2018	2017	2016	2015	2014
Annual Money-Weighted Rate of Return Net of Investment Expense	9.7%	11.8%	1.6%	3.7%	17.2%

[1] 10-year trend information will be disclosed prospectively.

Required Supplementary Information
Schedule of Defined Benefit Pension Plan Employer Contributions[3] (Unaudited)
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2018	2017	2016	2015	2014
Actuarially determined contributions[1]	$ 1,318,672	$ 960,254	$ 941,321	$ 909,912	$ 866,635
Contributions in relation to the actuarially determined contributions[2]	1,318,672	960,254	941,321	909,912	866,635
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 10,044,005	$ 10,037,542	$ 9,428,447	$ 9,000,246	$ 8,701,657
Contributions as a percentage of covered payroll	13.13%	9.57%	9.98%	10.11%	9.96%

Notes:

[1] The actuarially determined contributions on this Schedule of Defined Benefit Pension Plan Contributions have been adjusted to remove contribution requirements related to employer-specific liabilities.

[2] Employer contributions on the Statement of Changes in Fiduciary Net Position include interest related to employer-specific liabilities and employers' optional supplemental contributions.

[3] For Actuarial Assumptions and Methods, see table below.

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	December 31, 2015	December 31, 2013	December 31, 2011
Effective:	July 2017 - June 2019	July 2015 - June 2017	July 2013 - June 2015
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Projected Unit Credit
Amortization method:	Level percentage of payroll	Level percentage of payroll	Level percentage of payroll
Asset valuation method:	Market value	Market value	Market value
Remaining amortization periods:	20 years	20 years	N/A
Actuarial assumptions:			
Inflation rate	2.50 percent	2.75 percent	2.75 percent
Projected salary increases	3.50 percent	3.75 percent	3.75 percent
Investment rate of return	7.50 percent	7.75 percent	8.00 percent

2013	2012	2011	2010	2009
$ 781,015	$ 774,461	$ 361,655	$ 377,778	$ 592,546
781,015	774,461	361,655	377,778	592,546
$ –	$ –	$ –	$ –	$ –
$ 8,280,731	$ 8,650,799	$ 8,618,636	$ 8,451,349	$ 8,281,261
9.43%	8.95%	4.20%	4.47%	7.16%

December 31, 2009	December 31, 2007	December 31, 2005
July 2011 - June 2013	July 2009 - June 2011	July 2007 - June 2009
Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll	Level percentage of payroll	Level percentage of payroll
Market value	Market value	Market value
N/A	20 years	22 years
2.75 percent	2.75 percent	2.75 percent
3.75 percent	3.75 percent	3.75 percent
8.00 percent	8.00 percent	8.00 percent

Required Supplementary Information
Schedule of Changes in Net OPEB (Asset) and Related Ratios (Unaudited)
Other Postemployment Benefit Plans - RHIA
For the Fiscal Year Ended June 30,[1]
(amounts in millions)

	2018	2017
Total OPEB Liability [2]		
Service Cost	$ 3.1	$ 3.4
Interest on Total OPEB Liability	34.2	33.8
Changes in Benefit Terms	–	–
Changes in Assumptions	(0.5)	–
Differences Between Expected and Actual Experience	(9.1)	–
Benefit Payments	(32.5)	(31.2)
Net Change in Total OPEB Liability	(4.8)	6.0
Total OPEB Liability - Beginning	470.0	464.0
Total OPEB Liability - Ending	$ 465.2	$ 470.0
Plan Fiduciary Net Position		
Employer Contributions	$ 48.0	$ 49.8
Net Investment and Other Income	50.9	57.6
Benefit Payments	(32.6)	(31.2)
Administrative Expense	(1.3)	(1.3)
Net Change in Plan Fiduciary Net Position	65.0	74.9
Plan Fiduciary Net Position - Beginning	511.8	436.9
Plan Fiduciary Net Position - Ending	$ 576.8	$ 511.8
Net OPEB (Asset)	$ (111.6)	(41.8)
Plan Fiduciary Net Position as a Percentage of the Total OPEB (Asset)	124.0 %	108.9 %
Covered Payroll	$ 4,303.2	4,570.1
Net OPEB (Asset) as a Percentage of Covered Payroll	(2.59) %	(0.91) %

[1] 10-year trend information will be disclosed prospectively

[2] See Table 28 for Actuarial Methods and Assumptions

Changes in Benefit Terms and Assumptions:
Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2018 total OPEB liability. The changes include the lowering of the long-term expected rate of return was to 7.20 percent. In addition, healthy retiree participation and healthy mortality assumptions were changed to reflect an updated trends and mortality improvement scale for all groups.

Schedule of Investment Returns (Unaudited)
Other Postemployment Benefit Plans - RHIA
For the Fiscal Year Ended June 30[1]

	2018	2017
Annual Money-Weighted Rate of Return Net of Investment Expense	9.7%	12.5%

[1] 10-year trend information will be disclosed prospectively.

Required Supplementary Information
Schedule of Changes in Net OPEB Liability and Related Ratios (Unaudited)
Other Postemployment Benefit Plans - RHIPA
For the Fiscal Year Ended June 30,[1]
(amounts in millions)

	2018	2017
Total OPEB Liability [2]		
Service Cost	$ 1.5	$ 1.5
Interest on Total OPEB Liability	5.2	5.0
Changes in Benefit Terms	–	–
Changes in Assumptions	0.4	–
Differences Between Expected and Actual Experience	(3.0)	–
Benefit Payments	(4.7)	(4.3)
Net Change in Total OPEB Liability	(0.6)	2.2
Total OPEB Liability - Beginning	70.9	68.7
Total OPEB Liability - Ending	$ 70.3	$ 70.9
Plan Fiduciary Net Position		
Employer Contributions	$ 13.3	$ 11.9
Net Investment and Other Income	2.4	2.0
Benefit Payments	(4.7)	(4.3)
Administrative Expense	(0.3)	(0.3)
Net Change in Plan Fiduciary Net Position	10.7	9.3
Plan Fiduciary Net Position - Beginning	24.3	15.0
Plan Fiduciary Net Position - Ending	$ 35.0	$ 24.3
Net OPEB Liability	$ 35.3	$ 46.6
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	49.8 %	34.3 %
Covered Payroll	$ 1,165.3	$ 1,327.1
Net OPEB Liability as a Percentage of Covered Payroll	3.03 %	3.51 %

[1] 10-year trend information will be disclosed prospectively
[2] See Table 28 for Actuarial Methods and Assumptions

Changes in Benefit Terms and Assumptions:
Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2018 total OPEB liability. The changes include the lowering of the long-term expected rate of return was to 7.20 percent. In addition, the healthy healthcare participation and cost trend rates, and healthy mortality assumptions were changed to reflect an updated trends and mortality improvement scale for all groups.

Schedule of Investment Returns (Unaudited)
Other Postemployment Benefit Plans - RHIPA
For the Fiscal Year Ended June 30[1]

	2018	2017
Annual Money-Weighted Rate of Return Net of Investment Expense	10.2%	14.3%

[1] 10-year trend information will be disclosed prospectively

Required Supplementary Information
Schedule of OPEB - RHIA Employer Contributions[1] (Unaudited)
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2018	2017	2016	2015	2014
Actuarially determined contributions[1]	$ 47,998	$ 49,786	$ 44,588	$ 53,648	$ 48,253
Contributions in relation to the actuarially determined contributions	47,998	49,786	44,588	53,648	48,253
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 10,044,005	$ 10,037,542	$ 9,428,447	$ 9,000,246	$ 8,686,772
Contributions as a percentage of covered payroll	0.48%	0.50%	0.47%	0.60%	0.56%

Note:
[1] For Actuarial Assumptions and Methods, see table below.

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	December 31, 2015	December 31, 2013	December 31, 2011
Effective:	July 2017 - June 2019	July 2015 - June 2017	July 2013 - June 2015
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Projected Unit Credit
Amortization method:	Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
Amortization Period:	10 years	10 years	10 years
Asset valuation method:	Market value	Market value	Market value
Remaining amortization periods:	20 years	20 years	N/A
Actuarial assumptions:			
Inflation rate	2.50 percent	2.75 percent	2.75 percent
Healthcare cost trend rates	None. Statute stipulates $60 monthly payment for healthcare insurance.	None. Statute stipulates $60 monthly payment for healthcare insurance.	None. Statute stipulates $60 monthly payment for healthcare insurance.
Projected salary increases	3.50 percent	3.75 percent	3.75 percent
Investment rate of return	7.50 percent	7.75 percent	8.00 percent

2013	2012	2011	2010	2009
$ 47,294	$ 46,465	$ 22,177	$ 22,351	$ 28,813
47,294	46,465	22,177	22,351	28,813
$ –	$ –	$ –	$ –	$ –
$ 8,686,771	$ 8,650,799	$ 8,618,636	$ 8,451,349	$ 8,281,261
0.54%	0.54%	0.26%	0.26%	0.35%

December 31, 2009	December 31, 2007	December 31, 2005
July 2011 - June 2013	July 2009 - June 2011	July 2007 - June 2009
Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
10 years	N/A	N/A
Market value	Market value	Market value
N/A	20 years	22 years
2.75 percent	2.75 percent	2.75 percent
None. Statute stipulates $60 monthly payment for healthcare insurance.	None. Statute stipulates $60 monthly payment for healthcare insurance.	None. Statute stipulates $60 monthly payment for healthcare
3.75 percent	3.75 percent	3.75 percent
8.00 percent	8.00 percent	8.00 percent

Required Supplementary Information
Schedule of OPEB - RHIPA Employer Contributions[1] (Unaudited)
Last 10 Fiscal Years
(Dollar amounts in thousands)

	2018	2017	2016	2015	2014
Actuarially determined contributions[1]	$ 13,290	$ 11,864	$ 10,967	$ 6,887	$ 6,150
Contributions in relation to the actuarially determined contributions	13,290	11,864	10,967	6,887	6,150
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 2,952,776	$3,024,383	$ 2,850,753	$ 2,737,792	$ 2,566,555
Contributions as a percentage of covered payroll	0.45%	0.39%	0.38%	0.25%	0.24%

Note:

[1] For Actuarial Assumptions and Methods, see table below.

<u>Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions</u>

Actuarial Valuation:	December 31, 2015	December 31, 2013	December 31, 2011
Effective:	July 2017 - June 2019	July 2015 - June 2017	July 2013 - June 2015
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Projected Unit Credit
Amortization method:	Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
Amortization Period:	10 years	10 years	10 years
Asset valuation method:	Market value	Market value	Market value
Remaining amortization periods:	20 years	20 years	N/A
Actuarial assumptions:			
Inflation rate	2.50 percent	2.75 percent	2.75 percent
Healthcare cost trend rates	Graded from 6.3 percent in 2016 to 4.4 percent in	Graded from 6.1 percent in 2014 to 4.7 percent in	Graded from 6.9 percent in 2012 to 4.5 percent in
Projected salary increases	3.50 percent	3.75 percent	3.75 percent
Investment rate of return	7.50 percent	7.75 percent	8.00 percent

2013	2012	2011	2010	2009
$ 3,444	$ 3,378	$ 1,428	$ 1,497	$ 2,005
3,444	3,378	1,428	1,497	2,005
$ –	$ –	$ –	$ –	$ –
$2,422,404	$ 2,563,850	$ 2,374,856	$ 2,353,312	$ 2,298,483
0.14%	0.13%	0.06%	0.06%	0.09%

December 31, 2009	December 31, 2007	December 31, 2005
July 2011 - June 2013	July 2009 - June 2011	July 2007 - June 2009
Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
10 years	N/A	N/A
Market value	Market value	Market value
N/A	20 years	22 years
2.75 percent	2.75 percent	2.75 percent
Graded from 7.0 percent in 2010 to 4.5 percent in	Graded from 8.0 percent in 2008 to 5.0 percent in	Graded from 9.0 percent in 2007 to 5.0 percent in
3.75 percent	3.75 percent	3.75 percent
8.00 percent	8.00 percent	8.00 percent

Required Supplementary Information

Schedule of Claims Development Information (Unaudited)
Standard Retiree Health Insurance Account
Fiscal and Policy Year Ended (In Millions)[1]

	2011	2012	2013	2014	2015	2016	2017	2018
1. Net earned required contribution and investment revenues	$ 174.19	$ 188.99	$ 195.59	$ 198.85	$ 226.61	$ 197.92	$ 157.55	$ 176.38
2. Unallocated expenses	20.01	22.15	25.00	29.00	32.09	26.30	16.55	16.11
3. Estimated incurred claims and expense, end of policy year	152.55	150.62	172.89	175.41	212.21	179.01	133.10	142.94
4. Paid (cumulative) as of:								
End of policy year	150.42	160.15	172.76	175.01	211.90	184.61	133.60	142.44
One year later	161.43	171.80	185.22	192.78	226.61	200.50	151.25	
Two years later	161.34	171.68	185.21	192.81	226.61	200.50		
Three years later	161.27	171.66	185.20	192.81	226.61			
Four years later	161.25	171.66	185.20	192.81				
Five years later	161.27	171.66	185.20					
Six years later	161.27	171.66						
Seven years later	161.27							
Eight years later								
Nine years later								
5. Reestimated incurred claims and expense:								
End of policy year	152.55	150.62	172.89	175.41	212.21	179.01	133.10	142.94
One year later	163.56	162.27	185.35	193.18	226.92	194.90	151.25	
Two years later	163.47	162.20	185.34	193.21	226.92	194.91		
Three years later	163.35	162.17	185.33	193.21	226.91			
Four years later	163.34	162.17	185.33	193.22				
Five years later	163.35	162.17	185.33					
Six years later	163.35	162.17						
Seven years later	163.35							
Eight years later								
Nine years later								
6. Increase (decrease) in estimated incurred claims and expense from end of policy year:	10.79	11.58	12.46	17.77	14.71	15.89	18.15	–

[1] 10-year trend information will be disclosed prospectively.

Other Supplementary Information

Other Supplementary Information
Schedule of Plan Net Position
Defined Benefit Pension Plan
As of June 30, 2018

	Regular Account	Oregon Public Service Retirement Plan Pension Program	Variable Account	Total
Assets:				
Cash and Cash Equivalents	$ 3,519,049,214	$ 282,656,831	$ 9,785,594	$ 3,811,491,639
Receivables:				
Employer	66,688,115	(587,388)	–	66,100,727
Interest and Dividends	115,113,792	8,147,228	–	123,261,020
Investment Sales and Other Receivables	1,904,142,849	132,657,700	–	2,036,800,549
Transitional Liability	493,252,928	–	–	493,252,928
Total Receivables	2,579,197,684	140,217,540	–	2,719,415,224
Interaccount Receivables and Payables	(7,771,824)	9,463,683	(1,691,859)	–
Due from Other Funds	1,477,606	–	–	1,477,606
Investments:				
Debt Securities	11,700,410,505	828,101,610	–	12,528,512,115
Public Equity	22,764,275,756	1,611,151,454	543,029,229	24,918,456,439
Real Estate	7,000,792,090	495,484,086	–	7,496,276,176
Private Equity	13,629,058,187	964,602,483	–	14,593,660,670
Alternative Equity	5,042,216,255	356,865,035	–	5,399,081,290
Opportunity Portfolio	1,484,827,543	105,089,311	–	1,589,916,854
Total Investments	61,621,580,336	4,361,293,979	543,029,229	66,525,903,544
Securities Lending Cash Collateral	994,168,428	70,545,935	45,756	1,064,760,119
Prepaid Expenses	3,727,144	263,790	–	3,990,934
Capital Assets at Cost, Net	25,025,630	1,978,680	–	27,004,310
Total Assets	**68,736,454,218**	**4,866,420,438**	**551,168,720**	**74,154,043,376**
Liabilities:				
Investment Purchases and Accrued Expenses	3,456,824,996	216,579,242	3,195,026	3,676,599,264
Deposits and Other Liabilities	75,305,240	567,698	1,569	75,874,507
Due Other Funds	9,146,698	–	–	9,146,698
Securities Lending Cash Collateral Due Borrowers	994,320,040	70,556,666	45,756	1,064,922,462
Total Liabilities	**4,535,596,974**	**287,703,606**	**3,242,351**	**4,826,542,931**
Net Position Restricted for Pension Benefits	**$ 64,200,857,244**	**$ 4,578,716,832**	**$ 547,926,369**	**$ 69,327,500,445**

Schedule of Changes in Plan Net Position
Defined Benefit Pension Plan
For the Fiscal Year Ended June 30, 2018

	Regular Account	Oregon Public Service Retirement Plan Pension Program	Variable Account	Total
Additions:				
Contributions:				
Employer	$ 721,283,007	$ 668,828,527	$ –	$ 1,390,111,534
Plan Member	12,388,755	–	169,876	12,558,631
Total Contributions	733,671,762	668,828,527	169,876	1,402,670,165
Investment Income:				
Net Appreciation (Depreciation) in Fair Value of Investments	4,851,063,059	363,459,657	66,285,031	5,280,807,747
Interest, Dividends and Other Investment Income	1,453,156,615	103,980,337	117,712	1,557,254,664
Total Investment Income	6,304,219,674	467,439,994	66,402,743	6,838,062,411
Less Investment Expense	(561,386,811)	(40,093,014)	(565,870)	(602,045,695)
Net Investment Income	5,742,832,863	427,346,980	65,836,873	6,236,016,716
Securities Lending Income:				
Securities Lending Income	25,232,363	1,611,798	79	26,844,240
Less Securities Lending Expense	(16,676,778)	(1,068,313)	(79)	(17,745,170)
Net Securities Lending Income	8,555,585	543,485	–	9,099,070
Other Income	2,354,742	1,962	–	2,356,704
Total Additions	6,487,414,952	1,096,720,954	66,006,749	7,650,142,655
Deductions				
Benefits	4,574,978,476	28,867,800	34,021,761	4,637,868,037
Death Benefits	4,849,807	–	–	4,849,807
Refunds of Contributions	13,682,867	–	193,427	13,876,294
Administrative Expense	30,211,334	6,436,218	1,103,767	37,751,319
Interaccount Transfers	(65,981,946)	–	65,981,946	–
Total Deductions	4,557,740,538	35,304,018	101,300,901	4,694,345,457
Net Increase	1,929,674,414	1,061,416,936	(35,294,152)	2,955,797,198
Net Position Restricted for Pension Benefits				
Beginning of Year	62,271,182,830	3,517,299,896	583,220,521	66,371,703,247
End of Year	$ 64,200,857,244	$ 4,578,716,832	$ 547,926,369	$ 69,327,500,445

Schedule of Administrative Expenses - All Funds
For the Fiscal Year Ended June 30, 2018

Personal Services:		
Staff Salaries	$	21,310,238
Social Security		4,425,580
Retirement		1,641,978
Unemployment Compensation		33,194
Worker Compensation		8,394
Insurance		5,285,773
Assessments		139,484
Total Personal Services		32,844,641
Professional Services:		
Actuarial		479,107
Data Processing		42,950
Audit		619,875
Legal Counsel		395,216
Medical Consultants		195,856
Training and Recruitment		430,060
Contract Services		6,634,693
Healthcare Fees		16,267,044
Total Professional Services		25,064,801
Communications:		
Printing		125,034
Telephone		320,489
Postage		579,764
Travel		196,821
Total Communication		1,222,108
Rentals:		
Office Space		482,348
Equipment		32,594
Total Rentals		514,942
Miscellaneous:		
Central Government Charges		2,358,144
Supplies		289,347
Maintenance		1,087,711
Non-Capitalized Equipment		3,047,509
Depreciation		2,769,206
Other		1,626
Total Miscellaneous		9,553,543
Total Administrative Expenses:	**$**	**69,200,035**

Other Supplementary Information
Schedule of Payments to Consultants and Contractors
For the Fiscal Year Ended June 30, 2018

Individual or Firm	Commission/Fees	Nature of Service
Milliman Inc	$ 479,107	Actuarial
Sarah Sally Louise Koch	1,175	Air Quality Test
Macias Gini & O'Connell LLP	619,875	Audit
Oregon Audits Division	18,362	Audit
CEM Benchmarking	45,000	Benchmarking
Cascade Centers Inc	9,335	Employee Benefit
Butler Partners & Associates LLC	195,856	Health Insurance
BenefitHelp Solutions	3,354,883	Health Insurance
ODS Health Plan Inc	12,867,532	Health Insurance
Voya	2,511,926	IAP Administration
Ice Miller LLP	3,701	Legal
Jill Goldsmith, Attorney at Law	6,768	Legal
Oregon Department of Justice	280,814	Legal
Frederick William Miller MD	42,350	Medical
Charles W Cammack Associates Inc	137,336	Technology
Gartner Group Inc	363,685	Technology
Kifinti Solutions Inc	45,781	Technology
Lancesoft	1,280,689	Technology
LexisNexis Risk Data Management Inc	3,340	Technology
MMC Systems Inc	1,255,873	Technology
U Work Com Inc	925,072	Technology
Oregon Department of Human Services	21,150	Vital Records

Other Supplementary Information
Summary of Investment Fees, Commissions, and Expenses
For the Year Ended June 30, 2018

	2018
Debt Securities Managers	
Alliance Bernstein L.P.	$ 1,848,144
BlackRock Financial Management	1,917,914
KKR Financial Credit Portfolio	6,094,627
Oak Hill Advisors	6,111,268
Wellington Management Company, LLP	1,289,779
Western Asset Management Company	1,482,281
Domestic Equity Fund Managers	
AQR Capital Management, LLC	1,808,186
Aronson+Johnson+Ortiz, LP	2,068,326
Boston Company	2,474,340
Callan LLC	1,174,670
Dimensional Fund Advisors	4,887,354
Eudaimonia Asset Management	836,976
Hamilton Lane	585,913
Wellington Management Company, LLP	2,905,120
International Equity Fund Managers	
Acadian Asset Management, Inc.	5,360,159
Adrian Lee & Partners	650,000
Alliance Bernstein International	3,612,014
AQR Capital Management	5,130,438
Arrowstreet Capital, LP	15,025,867
Brandes Investment Partners LLC	3,670,939
Dimensional Fund Advisors	4,687,616
EAM Investors, LLC	830,710
Genesis Asset Managers, LLP	3,400,849
Harris Associates LP	2,870,823
Lazard Asset Management	5,946,668
Los Angeles Capital Management	2,425,792
Pyramis Global Advisors	2,400,341
State Street Global Advisors	189,943
Walter Scott Management	2,870,278
Westwood Global Investments	2,365,923
William Blair & Company, LLC	3,273,802
Real Estate Portfolio Managers	
LaSalle Investment Management	1,218,832
ABS Allegiance RE	648,824
Aetos Capital Asia TE III	69,899
Aetos Capital Asia TE II	32,948
AG Asia Realty Fund II, LP	428,587
Alpha Asia Macro Trends Fund	271,000
Alpha Asia Macro Trends Fund II	2,082,480
Ascentris-OR Partners LLC	1,904,618
Beacon Capital Strategic Partners VI, LP	246,361
Blackstone Real Estate Partners VI, LP	316,359
Blackstone Real Estate Partners VII, LP	890,361
Brazil Real Estate Opportunities II	1,520,974
Buchanan Fund V	90,108
Cameron Village	562,596
CBRE Strategic Partners US Value Fund 6	57,521
Clarion	638,465
Clarion (Non Mandate)	817,128
Clarion Columbia Office Property	3,754,364
Cohen & Steers Capital Management	425,536
Columbia Woodbourne Holdings, LLC	441,294
DivcoWest Fund IV REIT, LP	337,753
DivcoWest Fund V	1,868,521
Fortress Investment Fund IV	318,476
Fortress Investment Fund V	780,164
GI Partners Fund III	427,952
Harrison Street Real Estate Partners V-A	1,209,676
Harrison Street REP V Co-Investment	237,534
Heritage Fields Capital	486,361
IL & FS India Realty Fund	66,513
IL & FS India Realty Fund II	278,498

	2018
Real Estate Portfolio Managers (continued)	
JPMCB Strategic Property Fund	$ 2,291,130
Landmark Real Estate Partners VII, LP	1,000,000
Lincoln	3,554,732
Lion Mexico Fund	238,002
Lionstone CFO ONE	10,268
Lionstone West End	848,250
Lone Star Fund IX	751,268
Lone Star Fund VI (US), LP	29,600
Lone Star Fund VIII	319,552
Lone Star Real Estate Fund (US), LP	42,524
Lone Star Real Estate Fund II	42,663
Lone Star Real Estate Fund III	441,236
Lone Star Real Estate Fund IV	685,465
Lone Star Real Estate Fund V	3,738,790
LORE One, LP (Core)	2,637,726
LORE One, LP (Value Add)	2,660,383
Madison Realty Capital Debt Fund III, LP	2,250,000
Och-Ziff Real Estate Fund III	1,250,000
Prime Property Fund	151,092
Prologis Targeted Europe Logistics Fund	1,527,959
Regency Core	1,116,269
Regency II	1,244,941
Rockpoint Finance Fund I, LP	17,907
Rockpoint Growth and Income Fund I, LP	1,005,982
Rockpoint Real Estate Fund II, LP	30,783
Rockpoint Real Estate Fund III	260,694
Rockpoint Real Estate Fund IV	609,867
Rockwood Capital RE Partners VII	480,653
Rockwood Capital RE Partners VIII	97,670
Rreef America REIT II	866,452
SH Group I, LP	28,767
Starwood Capital Hospitality Fund II Global LP	747,297
Talmage Separate Account (fka Guggenheim Sep Acc)	1,110,391
Vornado Capital Partners LP	619,538
Waterton Fund IX PT Chicago, LLC	582,000
Waterton Residential Property Venture XI	100,000
Waterton Residential Property Venture XII	1,340,588
Western National Realty II, PIV-O	650,232
Windsor Columbia Realty Fund	5,983,242
WRPV XI CK Expansion, LLC	374,547
Private Equity Portfolio Managers	
ACON Equity Partners IV	2,002,500
Advent International GPE VI A	428,905
Advent International GPE VII C	511,639
Advent Latin American Private Equity VI C	1,500,000
Affinity Asia Pacific Fund III	516,098
APAX IX	13,870
APAX VIII	1,433,773
Apollo Investment Fund IX	1,568,619
Apollo Investment Fund VI	236,756
Apollo Investment Fund VII	702,630
Apollo Investment Fund VIII	3,760,658
Aquiline Financial Services Fund	311,961
Aquiline Financial Services Fund II	1,047,724
Aquiline Financial Services Fund III	1,750,000
Austin Ventures X	750,000
Avista Capital Partners II	393,007
Avista Capital Partners III	517,099
Baring Asia Private Equity Fund V	1,332,282
Baring Asia Private Equity Fund VI	2,340,000
BDCM Opportunity Fund II	647,177
BDCM Opportunity Fund IV	2,169,041
Black Diamond Opportunity III	340,627
Blackstone Capital Partners VI	1,049,996

Other Supplementary Information
Summary of Investment Fees, Commissions, and Expenses
For the Year Ended June 30, 2018

Private Equity Portfolio Managers (continued)	2018
Blackstone Capital Partners VII	$ 5,625,000
Blackstone Energy Partners II	2,511,220
Capital International Private Equity Fund VI	617,102
Castle Harlan Partners V	454,647
CCMP Asia Opportunity Fund III	1,265,685
CDH Fund V	1,567,731
Centerbridge Capital Partners II	995,510
Centerbridge Capital Partners III	2,529,863
Centerbridge Capital Partners	286,768
Centerbridge Special Credit Partners III	2,249,999
Cinven V Fund	585,804
Cinven VI Fund	2,008,188
Coller International Partners	961,475
Coller International Partners V	383,721
Court Square Capital Partners III	1,125,000
Court Square Capital Partners II	238,093
CVC Capital Partners VI	1,670,968
CVC Capital Partners Asia VI	118,598
CVC Capital Partners VII	2,283,904
CVC European Equity V	240,736
EnCap Energy Capital Fund X	663,168
EnCap Energy Capital Fund XI	4,038,462
Endeavour Capital Fund VI	1,364,157
Endeavour Capital Fund VII	2,233,975
First Reserve XII	1,325,893
Fisher Lynch Capital Fund II	2,302,866
Focus Ventures III	348,124
Francisco Partners II	8,518
Francisco Partners III	(26,675)
Francisco Partners IV	2,090,319
Francisco Partners V	1,491,667
General Atlantic Partners	3,750,000
Genstar Capital Partners VIII	1,750,000
Genstar VIII Opportunities Fund	88,567
GGV Capital IV	778,835
GGV Capital Select	225,984
GGV Capital V	879,415
GGV Capital VI	900,000
GGV Discovery I	400,000
GI Partners Fund V	4,006,454
GI Partners Fund IV	1,562,587
Gores Capital Partners II	205,556
Gores Capital Partners III	494,515
Granite Ventures II	134,591
Green Equity Investors V	396,607
Green Equity Investors VI	944,824
Green Equity Investors VII	256,880
Grove Street NEV Fund	120,000
Grove Street NEV Fund III	1,000,000
Grove Street NEV Fund II	500,000
GSO Capital Opportunities Fund I	37,531
GSO Capital Opportunities Fund II	734,868
GTCR Fund XII	1,763,081
Hamilton Lane Int'l SMID Fund	1,206,961
HarbourVest Partners 2007 Direct Fund	66,402
HarbourVest Partners 2013 Direct Fund	712,868
Hellman + Friedman Cap VIII	1,875,000
KKR 2006 Fund	1,376,553
KKR Asian Fund	155,905
KKR Asian Fund II	1,973,550
KKR European Fund II	170,088
KKR European Fund III	1,164,658
KKR Millenium Fund	154,315
KKR North America XI Fund	3,338,781

Private Equity Portfolio Managers (continued)	2018
KSL Capital Partners Credit Opportunities Fund	$ 253,204
KSL Capital Partners Fund III	429,857
KSL Capital Partners IV	1,891,331
Lion Capital Fund III	782,917
Lion Capital Fund II	668,137
Littlejohn Fund IV	577,812
MatlinPatterson Fund III	345,726
Mayfield Select	7,756
Mayfield XIV	639,216
Mayfield XV	193,530
MBK Partners IV	3,687,500
MHR Institutional Partners III	310,214
MHR Institutional Partners IV	2,625,000
Montauk TriGuard Fund III	750,000
Montauk TriGuard Fund IV	405,531
Montauk TriGuard Fund V	577,125
Montauk Triguard Fund VI	950,000
New Mountain Partners III	485,764
Nordic Capital Fund VIII	867,886
North Haven Private Equity Asia IV	1,500,000
Novalpina Capital Fund I	2,919,399
Oak Investments Partners XII	276,946
Oak Investments Partners XIII	812,822
Oaktree European Principal Fund III (US)	717,960
Oaktree Opportunities Fund IX	1,022,145
Oaktree Opportunities Fund VIII	191,880
Oaktree Opportunities Fund VIIIb	471,746
Oaktree Opportunities Fund X	800,000
Oaktree Opportunities Fund Xb	1,425
Oaktree Principal Fund V	929,293
OCM Opportunities Fund VII	95,153
OCM Opportunities Fund VIIb	124,257
OCM Principal Opportunities Fund IV	108,844
OHA European Strategic Credit Fund	69,492
OPUS Capital Fund VI	661,416
OPUS Capital V	647,694
OrbiMed Private Investments IV	1,198,051
Orchid Asia VI	1,326,340
Orchid Asia VII	675,000
Oregon Investment Fund (Series 1)	277,195
Oregon Investment Fund (Series 1-A)	208,731
Palladium Equity Partners IV	722,658
Palladium Equity Partners V	1,739,611
Pathway Private Equity Fund III	115,955
Pathway Private Equity Fund III-B	2,363,883
Permira VI	3,811,905
Pine Brook Capital Partners II	1,749,052
Pine Brook Capital Partners	485,414
Providence Equity Partners VI	421,158
Providence Equity Partners VII	2,250,000
Public Pension Capital	1,440,396
Rhône Partners III	42,136
Rhône Partners IV	339,246
Rhône Partners V	4,206,240
Riverside Capital Appreciation Fund VI	1,500,000
Riverside Capital Appreciation Fund V	502,174
Riverside Europe Fund IV	203,178
Riverstone-Carlyle RAE Fund II	308,500
Roark Capital Partners IV	1,636,532
Roark Capital Partners V	1,726,028
RRJ Capital Master Fund II	215,784
RRJ Capital Master Fund III	2,604,168
Sofinnova Venture Partner VIII	246,869
Tailwind Capital Partners II	703,223

Other Supplementary Information
Summary of Investment Fees, Commissions, and Expenses
For the Year Ended June 30, 2018

	2018
Private Equity Portfolio Managers (continued)	
Tailwind Capital Partners III	$ 1,571,918
Tailwind Capital Partners	343,708
TDR Capital III	1,042,186
TDR Capital IV	1,734,354
Technology Crossover Ventures VII	305,800
Terra Firma Capital Partners III	552,434
TPG GROWTH II	680,558
TPG GROWTH III (A)	2,169,665
TPG Growth IV	2,636,987
TPG Partners VI	2,306,371
TPG Partners VII	3,270,864
TPG Star	79,178
Union Square Ventures 2012	412,500
Union Square Ventures 2014	295,312
Union Square Ventures Opportunity Fund	168,750
USV 2016	313,500
USV Opportunity 2014	135,937
Vector Capital Fund IV	355,134
Veritas Capital Fund IV	611,748
Veritas Capital Fund V	2,101,091
Veritas Capital Fund VI	3,681,089
Vestar Capital Partners V	211,109
Vestar Capital Partners VI	1,021,508
Vista Equity Partners Fund V	3,000,000
Vista Equity Partners Fund III	217,408
Vista Equity Partners Fund IV	1,116,630
Vista Equity Partners Fund VI	7,500,000
Vista Foundation Fund III	4,000,000
Vista Foundation Fund II	1,500,000
Warburg Pincus Private Equity IX	92,580
Wellspring Capital Partners IV	88,049
Wellspring Capital Partners V	468,981
WLR Recovery Fund IV	103,407
WLR Recovery Fund V	908,780
Alternatives Portfolio Managers	
Alinda Infrastructure Fund II	1,603,897
Alterna Core Capital Assets Fund II	1,147,638
Appian Natural Resources Fund	1,000,000
AQR Multi-Strategy Fund X	3,164,010
Aspect Core Trend HV Fund	797,694
BlackRock Style Advantage Onshore	244,929
Brookfield Agriculture Fund II	1,515,000
Brookfield Infrastructure Fund III B	3,940,000
Brookfield Timberlands Fund V	109,856
EMR Capital Resources Fund II	2,141,875
EnCap Flatrock Midstream Fund III	524,199
EnCap Flatrock Midstream Fund IV	776,875
The Energy & Minerals Group Fund III	2,625,892
EnerVest Energy Institutional Fund XIV	3,000,000
EQT Infrastructure Fund III	2,868,022
Global Infrastructure Partners II	1,898,282
Global Infrastructure Partners III	4,539,646

	2018
Alternatives Portfolio Managers (continued)	
Global Infrastructure Capital Solutions Fund	$ 2,183,399
Highstar Capital Fund IV	1,070,699
Homestead Capital USA Farmland Fund II	1,500,000
International Infrastructure Finance Company Fund	441,705
LS Power Equity Partners III	1,500,000
NGP Agribusiness Follow-on Fund	1,152,624
NGP Natural Resources X	880,294
NGP Natural Resources XI	2,886,299
NGP Natural Resources XII	2,868,159
Northern Shipping Fund III	1,875,000
Reservoir Resource Partners	107,069
Reservoir Strategic Partners Fund	507,756
SailingStone Global Natural Resources Portfolio	1,369,514
Starwood Energy Infrastructure Fund III	2,250,000
Stonepeak Infrastructure Fund	1,026,880
Stonepeak Infrastructure Fund II	4,208,063
Stonepeak Infrastructure Fund III	1,946,101
Taurus Mining Finance Annex Fund	625,000
Taurus Mining Finance Fund	1,250,000
Tillridge Global Agribusiness Partners II	1,750,001
Twin Creeks Timber	354,360
Warwick Partners III	3,000,000
Opportunity Portfolio Managers	
Apollo Credit Opportunity Fund II	6,329
Blackstone Tactical Opportunities - O	3,517,611
Content Partners Fund 3	750,000
Fidelity Real Estate Opportunistic Income Fund	(1,548,272)
Galton Onshore Mortgage Recovery Fund III	384,503
Lone Star Fund X	2,173,235
Nephila Juniper Fund	906,447
Nephila Palmetto Fund	901,506
OrbiMed Royalty Opportunities Fund II	787,500
Owl Rock Capital Corporation	117,020
Providence TMT Special Situations Fund	10,198
SailingStone Natural Gas Portfolio	314,786
Sanders Capital All Asset Value Fund	4,139,084
TPG Specialty Lending Europe I (US Feeder)	1,244,298
TSSP Adjacent Opportunities Partners	6,254,364
Russell Investments - Cash Overlay	801,715
BlackRock - Variable Fund	300,502
Alliance Bernstein - IAP Target Date Fund	1,461,058
Brokerage Commissions	14,413,808
Consulting and Subscription Fees	7,197,822
State Street Bank:	
Incentive Fee/Carried Interest	115,955,920
Foreign Income Taxes	14,788,159
Operating Expenses[1]	26,186,246
Other Expenses[2]	13,666,386
State Treasury Fees	22,523,571
Deferred Compensation Investment Fees and Expenses	3,915,634
Total Investment Fees, Commissions and Expenses	$ 680,011,556

[1]Start up fee for new private equity fund and improvement made to real estate property.
[2]Expenses related to legal, travel, and other adjustments.
Note: Negative management fees are due to adjusting entries and reimbursements.

INVESTMENT SECTION

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

JOHN D. SKJERVEM
CHIEF INVESTMENT OFFICER
INVESTMENT DIVISION

PHONE 503-431-7900
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STATE OF OREGON
OFFICE OF THE STATE TREASURER
16290 SW UPPER BOONES FERRY ROAD
TIGARD, OREGON 97224

October 24, 2018

Dear PERS Members:

The Investment Division of the Oregon State Treasury (OST) manages a large and complex investment portfolio. This portfolio is designed to generate investment returns which help fund many important State objectives including retirement security for public sector employees, academic support for Oregon schoolchildren and compensation claims for injured state workers. In aggregate, the Investment Division oversees a financial and real asset portfolio that exceeded $100.7 billion as of June 30, 2018. This portfolio includes the Oregon Public Employee Retirement Fund (OPERF), which advanced 9.4% last fiscal year, totaled $77.3 billion at June 30, 2018 and comprised the Oregon Public Employee Retirement System Defined Benefit Pension Plan, the Individual Account Program of the Oregon Public Service Retirement Plan and other post-employment benefit plans.

Consistent with institutional investment standards, OPERF is broadly and deliberately diversified across several asset classes and multiple developed and emerging market geographies. Moreover, OPERF investment strategies have historically produced good results: average, annualized net returns for the three-, five- and ten-year periods ended June 30, 2018 were 7.5%, 8.6% and 6.8%, respectively[1]. According to state actuaries, this consistently positive investment performance has significantly reduced taxpayers' share of retiree benefit payments.

On behalf of all Oregon Public Employee Retirement System beneficiaries, OPERF assets are commingled, invested consistent with a common set of objectives and allocated among the following five, strategic investment categories: public equity; private equity; real estate; fixed income; and other "alternative" and "opportunistic" investments. Return expectations and target allocations for each of these five categories are developed between staff and external consultants; moreover, return forecasts contemplate a 20-year investment horizon. Importantly, equity-oriented investments represent OPERF's largest capital allocation. While improving the likelihood of generating an adequate, long-term return, this equity-biased approach also produces higher levels of short-term portfolio volatility.

For example, in bull market conditions (e.g., 2017), OPERF's equity-oriented portfolio will likely generate strong investment results, but during periods of market duress and/or outright asset price declines (e.g., 2008), OPERF's investment performance will lag long-term expectations and may even register negative returns. Accordingly, the Investment Division has broadly diversified OPERF's portfolio in an attempt to mitigate short-term asset price volatility and protect against a sharp and/or protracted downturn in any single market, geography or asset category.

[1] All performance figures cited throughout this letter are based on market values and time-weighted return calculations.

PERS Letter
October 24, 2018

The U.S. stock market (as measured by the Russell 3000 index) generated strong returns last fiscal year (FY 2018), advancing 14.8% over the 12-month period ended June 30, 2018. With a net gain of 15%, OPERF's U.S. public equity portfolio outperformed its Russell 3000 benchmark due to an emphasis on small capitalization stocks, a proxy for which (namely, the Russell 2000 index) jumped 17.6% in FY 2018. Foreign equities lagged domestic stocks in FY 2018, but most international and emerging market indices produced positive results. OPERF managers investing abroad produced a collective 8.9% gain last fiscal year, better than the 7.8% earned by OPERF's non-U.S. public equity benchmark, the MSCI ACWI Ex-US IMI Net index.

With an estimated fiscal year-end value of $15.4 billion, OPERF's private equity investments represented 20.0% of total OPERF assets at June 30, 2018, and generated a net gain of 17.8% in FY 2018. This result eclipsed the private equity portfolio's 17.2% benchmark return. At 9.6%, average annual returns over the previous 10-year period fell considerably short of the 13.3% return for this same benchmark, the Russell 3000 (lagged one quarter) plus 300 basis points, as public markets assets pushed further into a multi-year trend of outperformance relative to private market equivalents.

In real estate, OPERF capital is allocated across four property or security types: core; value-add; opportunistic; and publicly-traded real estate investment trusts (i.e., REITs). In FY 2018, OPERF's real estate investments generated an 8.7% net gain, ahead of the 7.1% return on OPERF's real estate benchmark, the NCREIF Fund Index – Open End Diversified Core Equity, lagged one quarter. At fiscal year-end, these real estate investments were valued at $7.8 billion, and represented 10.2% of total OPERF assets. For the ten-year period ended June 30, 2018, OPERF's real estate portfolio delivered a net 5.9% on an average annual basis, shy of the benchmark's 6.1% average annual return during that same period.

Bond markets delivered modest and volatile results in FY 2018, as interest rates rose in response to surging U.S. economic growth and the U.S. Federal Reserve's monetary policy tightened steadily. Investments in fixed income securities comprised 22.6% of total OPERF assets at June 30, 2018, and contributed a mere 0.3% net return in FY 2018, beating the near negligible 0.2% return recorded by OPERF's custom fixed income benchmark.

Finally, OPERF investments in "alternative" assets and "opportunistic" strategies contributed disparate but positive results in FY 2018 (4.5% and 7.3%, respectively), an expected outcome given the highly heterogeneous nature of these two categories which include, among other things, investments in minerals and mining, timber, agriculture, infrastructure and select, systematic hedge funds. At June 30, 2018, these alternative asset and opportunistic strategies comprised only 10.2% of OPERF's total portfolio, but the Investment Division plans to continue expanding these strategies' combined OPERF allocation given their attractive return and diversification attributes.

Sincerely,

John D. Skjervem
Chief Investment Officer

Investment Objectives

The function of PERS is to provide present and future retirement or survivor benefits for its members. The investment program comprising OPERF, which includes PERS' Defined Benefit Pension Plan, Oregon Public Service Retirement Plan – Individual Account Program, and Other Post Employment Benefit Plans, is managed to provide long-term financial security for PERS members while maintaining the Fund's stability and future productivity. The OIC has established policies that promote and guide investment strategies with the highest probability of achieving PERB's approved, actuarial discount rate at a corresponding risk level deemed acceptable for both active and retired PERS members.

Description of Investment Policies

Oregon Revised Statute (ORS) 293.706 established the Oregon Investment Council (OIC), which consists of five voting members. Four members of the council, who are qualified by training and experience in the field of investment or finance, are appointed by the governor subject to state Senate confirmation. The state treasurer serves as the council's remaining voting member. In addition, the director of the Public Employees Retirement System serves as a non-voting OIC member.

ORS 293.701 defines the investment funds over which OIC has responsibility. Included are the Oregon Public Employees Retirement Fund (OPERF) and the Deferred Compensation Fund. OIC establishes policies for the investment and reinvestment of moneys in the investment funds as well as the acquisition, retention, management, and disposition of investments in the investment funds. OIC is also responsible for providing an examination of the effectiveness of the investment program.

OIC ensures moneys in the investment funds are invested and reinvested to achieve the investment objective of making the moneys as productive as possible. Furthermore, the investments of those funds are managed as a prudent investor would do under the prevailing circumstances and in light of the purposes, terms, distribution requirements, and laws governing each investment fund. This standard requires the exercise of reasonable care, skill, and caution and is applied to investments not in isolation, but in the context of each fund's portfolio as part of an overall investment strategy. The strategy should incorporate risk and return objectives reasonably suitable to the particular investment fund.

When implementing investment decisions, OIC has a duty to diversify the investments of the investment funds unless, under the circumstances, it is not prudent to do so. In addition, OIC must act with prudence when selecting agents and delegating authority. OIC has approved the following asset classes for OPERF: Short-Term Investing, Fixed Income, Real Estate, Public and Private Equities, and Alternative Investments. In addition, OPERF invests in the Opportunity Portfolio, which may be populated with investment approaches across a wide range of investment opportunities with no limitation as to asset classes or strategies. OIC must approve, in advance, the purchase of investments in a new asset class not described above.

OIC has an open-door policy wherein investment officers employed by the Oregon State Treasury will hear and consider investment proposals and solicitations from any person, firm, or partnership that submits a proposal or solicitation in good faith. However, under no circumstance does this policy require that the Oregon State Treasury purchase the proposed investment.

OIC maintains an equal opportunity policy. When awarding contracts or agreements, OIC does not discriminate because of age, race, color, sex, religion, national origin, marital status, sexual orientation, or disability. Furthermore, OIC encourages firms doing or seeking to do business with OIC to have equal opportunity programs. OIC requires that all written contracts or agreements with OIC incorporate reference that affirms compliance with applicable nondiscrimination, equal opportunity, and contract compliance laws.

In compliance with ORS 192.630-660, OIC holds its meeting in a public forum. Public notice, including a meeting agenda, is provided to interested persons and news media that have requested notice. Written minutes and recordings are taken at all meetings.

OIC regularly reviews various aspects of investment policy, performance of investment managers and accounts, asset allocation, and a large number of investment proposals and recommendations. OIC's statement of Investment Objectives and Policy Framework is available on the Oregon State Treasury website at http://www.oregon.gov/treasury/Divisions/Investment/Pages/Oregon-Investment-Council-(OIC).aspx.

Investment Results*

	Periods Ending June 30, 2018		
		Annualized	
	1-Year	3-Year	5-Year
Total Portfolio, Excluding Variable Account	9.40 %	7.47 %	8.59 %
Policy Benchmark[1]	9.19	7.83	9.21
Variable Account	11.53	8.78	9.98
Benchmark: MSCI All Country World Investable Market Index Net	11.14	8.34	9.60
Domestic Stocks	15.01	11.11	12.83
Benchmark: Russell 3000 Index	14.78	11.58	13.29
International Stocks	8.88	6.61	7.66
Benchmark: MSCI All Country World ex-US Investable Market Index Net	7.75	5.46	6.39
Fixed Income Segment	0.28	1.79	2.46
Benchmark: Custom Index[2]	0.24	1.43	2.01
Real Estate	8.65	9.26	10.49
Benchmark: Oregon Custom Real Estate Benchmark[3]	7.11	8.66	9.96
Private Equity[4]	17.75	11.32	12.41
Benchmark: Russell 3000 Index + 300 bps (Adj.)[5]	17.19	13.51	16.39
Alternative Equity	4.45	4.79	3.42
Benchmark: Consumer Price Index + 400bps	6.98	5.90	5.59
Opportunity Portfolio	7.28	6.61	7.45
Benchmark: Russell 3000 Index	8.00	6.91	6.61

The rates of return reported in the Investment Section are based on a time-weighted rate of return methodology based upon market values, unless disclosed otherwise in the footnotes to the associated tables.

[1] From October 1, 2013 to March 31, 2016, the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 23.5% Oregon Custom FI Benchmark, 12.5% NCREIF Property Index quarter lag, 41.5% MSCI ACWI and 2.5% CPI+4%. From April 1, 2016 to June 30, 2016 the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 23.5% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 41.5% MSCI AC World Index and 2.5% CPI+4%. From July 1, 2016 to March 1, 2018 the policy benchmark is 20% Russell 3000+300 Bps quarter lag, 22.5% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 40% MSCI ACWI IMI Net and 5% CPI+4%. From April 1, 2018 to present the policy benchmark is 19% Russell 3000+300 Bps quarter lag, 22% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 39% MSCI ACWI IMI Net and 7.5% CPI+4%.

[2] From March 1, 2011 to December 31, 2013, index was 60% Barclays Capital (BC) U.S. Universal Index, 20% S&P/LSTA Leveraged Loan Index, 10% JP Morgan Emerging Market Bond Index Global Index, and 10% Bank of America Merrill Lynch (BofA ML) High Yield Master II Index. From January 1, 2014 to February 29, 2016, index was 40% BC U.S. Aggregate Bond, 40% BC U.S. 1-3 Year Government/Credit Bond Index, 15% S&P LSTA Leveraged Loan Index, and 5% BofA ML High Yield Master II Index. From March 1, 2016 to present, index is 46% Barclays Aggregate Bond, 37% Barclays Treasury, 13% S&P LSTA and 4% BofA ML High Yield Master II

[3] Through March 31, 2016, the Oregon Custom Real Estate Benchmark was made up of the NCREIF Property quarter lag Index. From April 1, 2016, the benchmark, is made up of the NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE) quarter lag Net of Fees. From July 1, 2017, the monthly return is calculated as the geometrically linked monthly-portion of the quarterly return. Returns are not actual monthly, but rather equivalent for all intra-quarter month, in order to match the actual quarterly return.

[4] Through December 31, 2016, the Private Equity return combines the estimated return from the most recent quarter with a revision component that trues up the past two quarters' reported returns with the past two quarters' actual returns.

[5] Until June 30, 2017 the index is Russell 3000+300 Bps, quarter lag. From July 1, 2017, the monthly return is calculated as the geometrically linked monthly-portion of the quarterly return. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

* Investment Results are based upon OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of individual holdings.

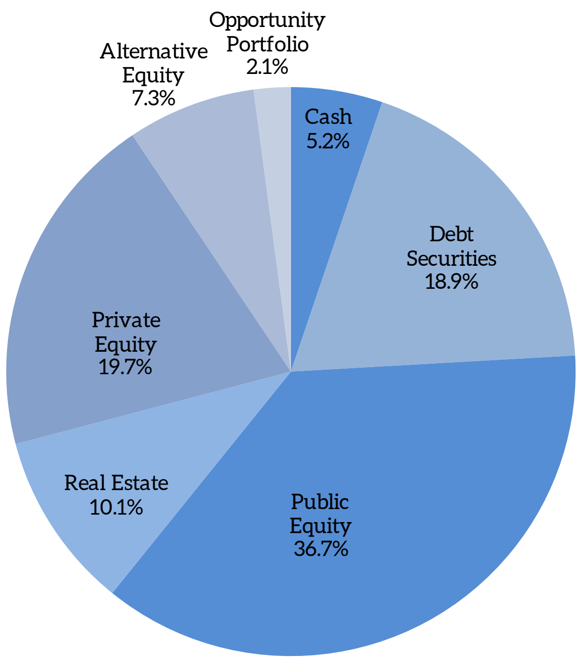
OIC Target and Actual Investment Allocation as of June 30, 2018*

Asset Class/Strategy	OIC Policy Range				OIC Target Allocation
Cash	0.0	-	3.0	%	0.0 %
Debt Securities	15.0	-	25.0		20.0
Public Equity	32.5	-	42.5		37.5
Real Estate	9.5	-	15.5		12.5
Private Equity	13.5	-	21.5		17.5
Alternative Investments	0.0	-	12.5		12.5
Opportunity Portfolio[1]	0.0	-	3.0		0.0
Total					100.0 %

Asset Class/Strategy	Actual Allocation
Cash	5.2 %
Debt Securities	18.9
Public Equity	36.7
Real Estate	10.1
Private Equity	19.7
Alternative Equity	7.3
Opportunity Portfolio	2.1
Total	100.0 %

[1] Opportunity Portfolio is an investment strategy and it may be invested up to 3% of total plan net assets.

Investment Mix by Asset Class/Strategy



Total Fund Performance
10-Year Review, One-Year Returns

* The OIC Target Allocations are based on OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of individual holdings. The Target Allocation amounts do not include Deferred Compensation Plan investments. The Actual Investment Allocation is based on the financial statement investment classifications, including Deferred Compensation Plan investments.

List of Largest Assets Held

Largest Stock Holdings (by Fair Value)
June 30, 2018

Description	Shares		Fair Value
Apple Inc.	2,054,727	$	380,350,515
Microsoft Corporation	2,590,064		255,406,211
Intel Corporation	3,634,363		180,664,185
Amazon.Com Inc.	101,288		172,169,342
Johnson & Johnson	1,383,862		167,917,815
JPMorgan Chase & Company	1,462,487		152,391,145
Facebook Inc. A	767,130		149,068,702
Pfizer Inc.	3,924,775		142,390,837
Bank of America Corporation	4,728,601		133,299,262
Mastercard Inc. A	669,624		131,594,508

Largest Bond Holdings (by Fair Value)
June 30, 2018

Description	Par Value		Fair Value
US Treasury Note 1.625% Due November 30, 2022	327,805,400	$	313,156,596
US Treasury Note 1.750% Due February 28, 2022	233,936,000		226,360,495
US Treasury Note 2.250% Due November 30, 2025	230,000,000		221,204,296
US Treasury Note 2.125% Due June 30, 2022	213,790,000		209,171,802
US Treasury Note 1.375% Due January 31, 2020	184,971,200		181,857,036
US Treasury Note 3.750% Due November 30, 2043	156,572,200		177,996,904
US Treasury Note 2.875% Due August 31, 2045	175,227,100		171,729,402
US Treasury Note 1.875% Due February 28, 2022	168,343,500		163,648,295
US Treasury Note 1.125% Due December 31, 2019	164,958,900		161,691,940
US Treasury Note 2.500% Due February 28, 2045	172,609,100		157,377,695

A complete list of portfolio holdings may be requested from the Oregon State Treasury, 350 Winter Street NE, Suite 100, Salem, OR 97301-3896.

Schedule of Fees and Commissions
For the Fiscal Year Ended June 30, 2018

	Assets Under Management	Fees	Percentage
Investment Managers' Fees:			
Debt Securities Managers	$15,429,157,797	$18,744,013	0.1215 %
Public Equity Managers	30,207,233,914	84,016,321	0.2781
Real Estate Managers	8,326,898,466	64,168,315	0.7706
Private Equity Managers	16,210,706,197	207,826,165	1.2820
Alternative Equity Managers	5,997,324,626	66,650,738	1.1113
Opportunity Portfolio Managers	1,766,087,042	19,958,609	1.1301
Total Assets Under Management	**$77,937,408,042**		
Other Investment Service Fees:			
Investment Consultants		7,197,822	
Commissions and Other Fees		211,449,573	
Total Investment Service and Managers' Fees		**$680,011,556**	

Schedule of Broker Commissions
For the Fiscal Year Ended June 30, 2018

Broker's Name	Commission	Shares / Par	Commission per Share
Goldman, Sachs & Co.	$ 1,666,436	199,909,699	$ 0.0083
INSTINET	1,582,275	688,634,805	0.0023
Investment Technology Group Inc.	1,157,303	445,788,499	0.0026
Barclays Capital, Inc.	930,610	64,314,602	0.0145
J.P. Morgan Securities Inc.	613,068	136,262,283	0.0045
Citigroup Global Markets Inc.	604,020	208,570,231	0.0029
UBS Securities Inc.	575,370	164,743,621	0.0035
Merrill Lynch, Pierce, Fenner & Smith Incorporated	505,591	59,862,165	0.0084
Morgan Stanley	435,492	164,048,032	0.0027
Société Générale	423,806	213,131,486	0.0020
Merrill Lynch & Co., Incorporated	422,187	152,841,223	0.0028
Credit Suisse Securities	339,252	94,218,331	0.0036
HSBC Bank	314,263	115,853,458	0.0027
Macquarie Bank Limited	312,757	200,970,381	0.0016
Pershing Securities Limited	310,266	982,153,094	0.0003
Deutsche Bank Securities Inc.	308,453	103,627,973	0.0030
Jefferies & Company, Inc.	290,733	73,487,366	0.0040
ICBC Standard Bank Plc	191,931	21,127,493	0.0091
Sanford C Bernstein & Co LLC	163,263	51,268,335	0.0032
Virtu Americas LLC	141,268	11,573,453	0.0122

Brokerage commissions on purchases and sales are too numerous to list; therefore, only the top 20 brokers by amount of commission paid are shown.

Investment Summary

Type of Investment	Fair Value as of June 30, 2018	Percent of Total Fair Value[1]
Debt Securities		
US Government Securities	$ 5,799,694,917	7.43 %
US Agency Securities	2,009,233,095	2.58
Corporate Bonds	3,487,529,018	4.47
Asset-Backed Securities	836,968,830	1.07
International Debt Securities	973,752,300	1.25
Non-US Government Debt Securities	249,630,195	0.32
Municipal Bonds	16,120,611	0.02
Guaranteed Investment Contracts[2]	177,300,377	0.23
Domestic Fixed Income Funds	1,829,956,948	2.35
Global Fixed Income Funds	48,971,506	0.06
Total Debt Securities	**15,429,157,797**	**19.78**
Public Equity		
Domestic Equity Securities	13,410,407,853	17.21
International Equity Securities	10,249,387,328	13.15
Domestic Equity Funds	2,014,805,845	2.59
Global Equity Funds	589,771,585	0.76
International Equity Funds	3,330,819,759	4.27
Target Date Funds	612,041,544	0.79
Total Public Equity	**30,207,233,914**	**38.77**
Real Estate	**8,326,898,466**	**10.68**
Private Equity	**16,210,706,197**	**20.80**
Alternative Equity	**5,997,324,626**	**7.70**
Opportunity Portfolio	**1,766,087,042**	**2.27**
Total Fair Value	**$ 77,937,408,042**	**100.00 %**

[1] These percentages do not include cash and cash equivalents.

[2] Guaranteed Investment Contacts are stated at contract value.

ACTUARIAL SECTION

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

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November 29, 2018

Public Employees Retirement Board
Oregon Public Employees Retirement System

Re: Actuarial Valuation as of December 31, 2017

Dear Members of the Board,

As part of our engagement with the Oregon Public Employees Retirement System ("PERS" or "the System"), we performed an actuarial valuation of PERS as of December 31, 2017. Our findings are set forth in the system-wide December 31, 2017 Actuarial Valuation, issued September 28, 2018. Previously, we published a system-wide December 31, 2016 Actuarial Valuation, which was issued December 6, 2017. Both reports reflect the current benefit provisions of the system, including the effects of the Oregon Supreme Court decision in *Moro v. State of Oregon*.

Both the December 31, 2017 Actuarial Valuation and the December 31, 2016 Actuarial Valuation are used to develop information provided in the Comprehensive Annual Financial Report (CAFR) for Oregon PERS. The December 31, 2017 Actuarial Valuation forms the basis for the *Actuarial Section* of the CAFR. The December 31, 2016 Actuarial Valuation is used to develop the financial reporting results required by Governmental Accounting Standards Board (GASB) Statement No. 67 for the Tier 1/Tier 2 and OPSRP programs and by GASB Statement No. 74 for the RHIA and RHIPA programs.

Actuarial Section of the CAFR

The material included in the *Actuarial Section* of CAFR for Oregon PERS is a subset of the results contained in the December 31, 2017 Actuarial Valuation. The descriptions in that report regarding the actuarial basis of the valuation and the material inputs and limitations of use of the valuation apply to the CAFR exhibits, and are incorporated herein by reference.

Actuarial valuations are performed annually, but only "rate-setting" valuations performed as of the end of each odd-numbered year are used to set actuarially determined biennial contribution rates. Those rates are then considered for adoption by the Public Employees Retirement Board ("PERB"). Interim valuations performed as of the end of each even-numbered year are only advisory in nature, and contribution rates developed in those valuations are not presented to the PERB for adoption.

The PERB has sole authority to determine the actuarial assumptions and methods used for the valuation. The actuarial assumptions and methods used in both the December 31, 2017 Actuarial Valuation and the December 31, 2016 Actuarial Valuation were adopted by the PERB based upon the results of the 2016 Experience Study conducted by Milliman, issued

Public Employees Retirement Board
Oregon Public Employees Retirement System
November 29, 2018
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July 26, 2017. The assumptions and methods were selected in a manner consistent with current Actuarial Standards of Practice.

Milliman prepared the following information that is presented in the *Actuarial Section* of the 2018 Comprehensive Annual Financial Report (CAFR) based on the December 31, 2017 Actuarial Valuation:

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

We understand the *Actuarial Section* of the CAFR will also include summaries of the actuarial methods, actuarial assumptions, and plan provisions valued. These summaries are contained in the December 31, 2017 Actuarial Valuation.

Financial Reporting Under GASB 67 and GASB 74

Under GASB 67 and GASB 74, the required financial reporting schedules present information using a Measurement Date of the System's fiscal year end. The Total Pension Liability (under GASB 67) and Total OPEB Liability (under GASB 74) for the June 30, 2018 fiscal year end were determined based on the results of the December 31, 2016 Actuarial Valuation. The liability calculated at the actuarial valuation date was then adjusted to the Measurement Date using standard actuarial roll-forward procedures. The Total Pension Liability/Total OPEB Liability is compared to the Fiduciary Net Position as of the Measurement Date, as provided by PERS and measured on a fair market value of assets basis, to determine the Net Pension Liability (Asset) under GASB 67 and the Net OPEB Liability (Asset) under GASB 74.

Milliman prepared the following exhibits for GASB 67 to assist PERS in completing the required *Notes to the Financial Statements* and *Required Supplementary Information*:

- Net Pension Liability (Asset)
- Changes in Net Pension Liability (Asset)
- Sensitivity Analysis
- Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
- Long Term Expected Rate of Return

These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 67 Reporting for Fiscal Year End 2018* letter dated November 28, 2018.

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Milliman prepared the following exhibits for GASB 74 to assist PERS in completing the required *Notes to the Financial Statements* and *Required Supplementary Information*:

- Net OPEB Liability (Asset)
- Changes in Net OPEB Liability (Asset)
- Sensitivity Analysis
- Schedule of Changes in Net OPEB Liability (Asset) and Related Ratios
- Long Term Expected Rate of Return

These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 74 Reporting for Fiscal Year End 2018* letter dated November 28, 2018. The first four exhibits listed above were provided separately for RHIA and RHIPA.

Funding Policy

The funding policy selected by the PERB is to adopt biennial contribution rates in accordance with the results of a "rate-setting" actuarial valuation performed using the assumptions and methods described in the associated actuarial valuation report. For example, the rates developed in the December 31, 2017 Actuarial Valuation were adopted by the PERB and established employer contributions for the July 1, 2019 to June 30, 2021 biennium. Contribution rates include funding the cost associated with new benefit accruals as well as amortizing any unfunded actuarial liability, determined using the market value of assets, over closed, layered amortization periods that vary from 10 to 20 years, according to the benefit program. The contribution rate stabilization method (also known as the "rate collar") limits rate changes from one biennium to the next, in effect phasing in changes over multiple rate-setting periods if asset or liability experience causes a large movement in the actuarially calculated contribution rate prior to application of the rate collar.

All members hired prior to August 29, 2003, are covered under Chapter 238 and are collectively referred to as Tier 1/Tier 2 members. Their benefit costs are calculated using two experience sharing pool valuations and some independent employer valuations. All school districts pool their Tier 1/Tier 2 experience through the school district pool. State government and some local governments pool their Tier 1/Tier 2 experience through the State and Local Government Rate Pool (SLGRP). As of December 31, 2017, there are also 126 independent employers who do not pool their Tier 1/Tier 2 experience with the other employers except through the Benefits in Force Reserve, which pools the experience of Tier 1/Tier 2 members in payee status across all employers and all other Tier 1/Tier 2 pooling arrangements.

All members hired after August 28, 2003, are covered under Chapter 238A and are referred to as OPSRP members, except for those members who previously established membership under Chapter 238 and meet the statutory requirements to reinstate those benefits. Experience for Chapter 238A members is pooled across all employers regardless of their status under the Chapter 238 arrangements. Chapter 238 benefits and Chapter 238A benefits are parts of a single plan.

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Oregon Public Employees Retirement System
November 29, 2018
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Finally, some employers made lump sum deposits in addition to their regularly scheduled contributions. These deposits are placed in a "side account" within the legally restricted pension trust and are used to offset a portion of future contribution requirements of the depositing employers via side account transfers. For financial reporting purposes, lump sum deposits are not considered as contributions in relation to the actuarially determined contribution. However, side accounts are included as assets in the Fiduciary Net Position. The Schedule of Funding Progress and Solvency Test also include side accounts as part of the Plan's assets.

Actuarial Basis

In preparing the valuation reports, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by statute, member census data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System.

The valuation reports are only an estimate of the System's financial condition as of a single date. They can neither predict the System's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of the System's actuarially calculated contributions. While the valuations are based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct.

Future actuarial measurements may differ significantly from the current measurements presented in these reports due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The PERB has the final decision regarding the appropriateness of the assumptions and adopted them as indicated herein at its July 2017 public meeting.

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Public Employees Retirement Board
Oregon Public Employees Retirement System
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Some of the actuarial computations presented in the valuation reports are for purposes of determining contribution rates for System employers. Other actuarial computations presented in the reports under GASB Statements No. 67, 68, 74, and 75 are for purposes of assisting the System and participating employers in fulfilling their financial reporting requirements. The computations prepared for these two purposes may differ as disclosed in our report. The calculations in the reports have been made on a basis consistent with our understanding of the System's funding policy and goals, the System benefit provisions as summarized in the reports, and GASB Statements No. 67, 68, 74, and 75. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in these reports. Accordingly, additional determinations may be needed for other purposes.

Milliman's work has been prepared exclusively for the Oregon Public Employees Retirement System for a specific and limited purpose. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. It is a complex, technical analysis that assumes a high level of knowledge concerning the System's operations, and uses the System's data, which Milliman has not audited. No third party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Sincerely,

Matthew R. Larrabee, FSA, EA, MAAA
Principal and Consulting Actuary

Scott D. Preppernau, FSA, EA, MAAA
Principal and Consulting Actuary

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OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Actuarial Methods and Assumptions

Tier 1/Tier 2 (including Retiree Healthcare)

Actuarial Methods and Valuation Procedures

In July 2017 the Board adopted the following actuarial methods and valuation procedures for the December 31, 2016 and 2017 actuarial valuations of PERS Tier 1/Tier 2 benefits.

Actuarial cost method	**Entry Age Normal.** Under the Entry Age Normal (EAN) cost method, each active member's **entry age present value of projected benefits** is allocated over the member's service from the member's date of entry until their assumed date of exit, taking into consideration expected future compensation increases. Thus, the total pension to which each member is expected to become entitled at retirement is broken down into units, each associated with a year of past or projected future credited service. Typically, when this method is introduced, there will be an initial liability for benefits credited for service prior to that date, and to the extent that the liability is not covered by assets of the plan, there is an unfunded accrued liability to be funded over a stipulated period in accordance with an amortization schedule. A detailed description of the calculation follows: • An individual member's **entry age present value of projected benefits** is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the member's entry age using the projected compensation and service at each separation date. • An individual member's **entry age present value of projected salaries** is the sum of the present value of the projected compensation over the member's working career associated with each possible future separation date, determined at the member's entry age. • An individual member's **present value of projected benefits** is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the valuation date using the projected compensation and service at each separation date. • An individual member's **normal cost** for a certain year is the member's **entry age present value of projected benefits** divided by the member's **entry age present value of projected salaries** and multiplied by the member's projected compensation for the year following the valuation date. • An individual member's **actuarial accrued liability** is the member's **present value of projected benefits** less the sum of the present value of the member's **normal costs** for each future year, determined at the valuation date using the projected compensation and service at each future year. – The plan's **normal cost** is the sum of the individual member normal costs, and the plan's **actuarial accrued liability** is the sum of the individual member accrued liabilities.
Tier 1/Tier 2 UAL amortization	The Tier 1/Tier 2 UAL amortization period was reset to 20 years as of December 31, 2013. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of projected combined valuation payroll (Tier 1/ Tier 2 plus OPSRP payroll) over a closed 20 year period from the valuation in which they are first recognized.

Retiree Healthcare UAL amortization	The UAL for Retiree Health Care as of December 31, 2007 is amortized as a level percentage of projected combined valuation payroll (Tier 1/ Tier 2 plus OPSRP payroll) over a closed 10 year period. Gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over a closed 10 year period from the valuation in which they are first recognized.
Asset valuation method	The actuarial value of assets equals the market value of assets, excluding the Contingency and Capital Preservation Reserves, and the Rate Guarantee Reserve when it is in positive surplus status. Market values are reported to Milliman by PERS. It is our understanding that select real estate and private equity investments are reported on a three-month lag basis. This valuation report does not attempt to quantify any effects of the reporting lag.
Contribution rate stabilization method	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts rate pool, OPSRP) are confined to a collared range based on the prior contribution rate (prior to application of side accounts, pre-SLGRP liabilities, and 6 percent Independent Employer minimum). The new contribution rate will generally not increase or decrease from the prior contribution rate by more than the greater of 3 percent of payroll or 20 percent of the prior contribution rate. If the funded percentage excluding side accounts drops below 60% or increases above 140%, the size of the collar doubles. If the funded percentage excluding side accounts is between 60% and 70% or between 130% and 140%, the size of the rate collar is increased on a graded scale.
Allocation of Liability for Service Segments	For active Tier 1/Tier 2 members who have worked for multiple PERS employers over their career, the calculated actuarial accrued liability is allocated among the employers based on a weighted average of the Money Match methodology, which uses account balance, and the Full Formula methodology, which uses service. The allocation is 15% (0% for police & fire) based on account balance with each employer and 85% (100% for police & fire) based on service with each employer. The entire normal cost is allocated to the current employer.
Allocation of Benefits-In-Force (BIF) Reserve	The BIF reserve is allocated to each rate pool in proportion to the retiree liability attributable to the rate pool.

Economic Assumptions

The Board adopted the following economic assumptions for the December 31, 2016 and 2017 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2016 Experience Study, published in July 2017. The assumption selection process and rationale is described in detail in that report.

Investment return	7.20% compounded annually
Pre-2014 Interest crediting	8.00% compounded annually on members' regular account balances 8.25% compounded annually on members' variable account balances
Post-2013 Interest crediting	7.20% compounded annually on members' regular account balances 7.20% compounded annually on members' variable account balances
Inflation	2.50% compounded annually
Administrative expenses	$37.5 million per year is added to the normal cost.
Payroll growth	3.50% compounded annually. This assumption represents the sum of the inflation assumption and a real wage growth assumption of 100 basis points.
Healthcare cost trend	Healthcare cost trend rates are used to estimate increases in the RHIPA Maximum Subsidy. These rates include consideration of the excise tax scheduled to be introduced in 2020 by the Affordable Care Act.

Year[1]	Rate	Year	Rate
2018	6.5%	2053 – 2058	5.3%
2019	5.9	2059 – 2063	5.2
2020	5.4	2064	5.1
2021 – 2023	5.3	2065	5.0
2024 – 2025	5.2	2066	4.9
2026 – 2027	5.3	2067 – 2068	4.8
2028	5.4	2069	4.7
2029 – 2032	6.2	2070	4.6
2033 – 2039	6.1	2071	4.5
2040	6.0	2072 – 2073	4.4
2041	5.8	2074 – 2090	4.3
2042 – 2043	5.7	2091	4.2
2044 – 2045	5.6	2092	4.3
2046 – 2048	5.5	2093+	4.2
2049 – 2052	5.4		

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

Demographic Assumptions

The Board adopted the following demographic assumptions for the December 31, 2016 and 2017 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2016 Experience Study, published in July 2017. The study relied on data from an observation period of January 1, 2013 to December 31, 2016, with the exception of the merit scale assumption, which relied on data from 2008 through 2016. Assumptions selected from the study represent an estimate of future experience based on relevant recent experience and reasonable expectations about the future.

Mortality

Healthy Retired Members

The following healthy retired mortality tables were first adopted in the December 31 valuation of the years shown.

Basic Table	RP 2014 Healthy Annuitant, Sex Distinct, Generational Projection with Unisex Social Security Data Scale	Valuation Year Adopted
School District male	White collar, set back 12 months	2016
Other General Service male*	Blended 50% blue collar / 50% white collar, set back 12 months	2016
Police & Fire male	Blended 50% blue collar / 50% white collar, set back 12 months	2016
School District female	White collar, set back 12 months	2016
Other female**	Blended 50% blue collar / 50% white collar, no set back	2016

** including male beneficiaries of members of all classes*

*** including female beneficiaries of members of all classes*

Disabled Retired Members

The following disabled retiree mortality rates were first adopted for the December 31, 2016 actuarial valuation.

Basic Table	RP 2014 Disabled Retiree, Sex Distinct, Generational Projection with Unisex Social Security Data Scale
Male	No collar adjustment or set back
Female	No collar adjustment or set back

Non-Annuitant Members

Mortality for non-annuitant members is assumed to follow the RP-2014 Employee table, sex distinct, with generational projection using a unisex Social Security data scale, and the same collar and set back adjustments for each group as described above for Healthy Retired members.

This assumption was first adopted for the December 31, 2016 actuarial valuation.

Retirement Assumptions

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

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

Rates of Retirement from Active Status

The following retirement rate assumptions were first adopted in the December 31, 2016 valuation.

	Police & Fire			General Service			School Districts			
Age	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs	Judges
Less than 50						15.00%			25.00%	
50	1.50%	2.00%	24.00%			15.00%			25.00%	
51	1.50%	2.00%	17.50%			15.00%			25.00%	
52	1.50%	2.00%	17.50%			15.00%			25.00%	
53	1.50%	2.00%	17.50%			15.00%			25.00%	
54	1.50%	3.50%	17.50%			15.00%			25.00%	
55	3.00%	10.00%	23.50%	1.50%	3.00%	15.00%	1.50%	4.00%	25.00%	
56	3.00%	8.00%	23.50%	1.50%	3.00%	15.00%	1.50%	4.00%	25.00%	
57	3.00%	8.00%	23.50%	1.50%	3.00%	15.00%	1.50%	4.00%	25.00%	
58	6.00%	8.00%	23.50%	1.50%	10.00%	20.00%	1.50%	12.50%	28.50%	
59	6.00%	8.00%	23.50%	3.50%	10.00%	20.00%	4.50%	12.50%	28.50%	
60	6.00%	11.00%	23.50%	6.00%	10.00%	20.00%	6.50%	12.50%	28.50%	6.00%
61	6.00%	14.00%	23.50%	6.00%	10.00%	20.00%	6.50%	12.50%	28.50%	6.00%
62	15.00%	25.00%	38.00%	13.00%	19.50%	31.00%	15.00%	25.00%	34.00%	6.00%
63	15.00%	17.00%	38.00%	11.50%	16.50%	22.00%	13.00%	19.50%	26.50%	6.00%
64	15.00%	17.00%	17.00%	12.50%	16.50%	22.00%	13.00%	19.50%	31.50%	6.00%
65	100.00%	100.00%	100.00%	19.50%	28.00%	32.00%	25.50%	33.50%	42.00%	6.00%
66				27.50%	35.00%	38.00%	23.00%	36.50%	42.00%	6.00%
67				22.50%	25.00%	26.00%	21.00%	34.50%	42.00%	10.00%
68				19.50%	25.00%	26.00%	21.00%	28.00%	28.50%	10.00%
69				19.50%	25.00%	26.00%	21.00%	28.00%	28.50%	10.00%
70				100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Retirement from Dormant Status

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

Lump Sum Option at Retirement

Members retiring may elect to receive a full or partial lump sum at retirement. The probability that a retiring member will elect a lump sum at retirement is summarized in the table below. These rates were first adopted effective December 31, 2016.

Lump Sum Option at Retirement	
Partial Lump Sum:	3.5% for all years
Total Lump Sum:	1.5% for 2018, declining by 0.5% per year until reaching 0.0%
No Lump Sum:	95.0% in 2018, increasing by 0.5% per year until reaching 96.5%

Purchase of Credited Service at Retirement

The following percentages of members are assumed to purchase credit for the six-month waiting period at retirement. These rates were first adopted effective December 31, 2016.

Purchase of Credited Service at Retirement	
Money Match Retirements:	0%
Non-Money Match Retirements:	65%

Judge Member Plan Election

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

Disability Assumptions

There are two disability assumptions used in the valuation - duty disability and ordinary disability. Duty disability rates are separated between Police & Fire and General Service, while ordinary disability is the same for all members. The rates for duty disability for General Service were first adopted effective December 31, 2014. The rates for duty disability for Police & Fire were first adopted effective December 31, 2012. The rates for ordinary disability were first adopted effective December 31, 2016.

	Percentage of the 1985 Disability Class 1 Rates
Duty Disability Police & Fire	20%
Duty Disability General Service	0.9%
Ordinary Disability	35% with 0.18% cap

Termination Assumptions

The termination assumptions were first adopted effective December 31, 2016, except for the Police & Fire and General Service females which were adopted effective December 31, 2014.

Termination Rates

Sample termination rates are shown for each group below:

Duration from Hire Date	School District Male	School District Female	General Service Male	General Service Female	Police & Fire
0	16.63%	13.50%	17.00%	18.50%	10.00%
1	14.25%	12.50%	15.33%	17.00%	5.97%
5	6.86%	7.13%	7.74%	9.29%	3.31%
10	3.31%	3.85%	4.15%	5.24%	2.23%
15	2.30%	2.68%	2.86%	3.66%	1.50%
20	1.62%	1.95%	2.07%	2.63%	1.01%
25	1.20%	1.50%	1.49%	1.89%	0.80%
30+	1.20%	1.50%	1.40%	1.50%	0.80%

For a complete table of rates, please refer to the 2016 Experience Study report for the System, published in July 2017.

Oregon Residency Post-Retirement

For purposes of determining eligibility for SB 656/HB 3349 benefit adjustments, 85% of retirees are assumed to remain Oregon residents after retirement.

Salary Increase Assumptions

The salary increase assumptions reflected in the actuarial valuation include:

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

Merit Increases

Merit increases are based on duration of service for the following groups with sample rates shown in the following table. These rates were first adopted effective December 31, 2016, except for the school district assumption, which was adopted December 31, 2014.

Duration	School District	Other General Service	Police & Fire
0	3.53%	3.38%	4.44%
1	3.20%	3.05%	3.95%
5	2.01%	1.94%	2.39%
10	0.82%	0.99%	1.23%
15	-0.07%	0.43%	0.69%
20	-0.67%	0.14%	0.52%
25	-0.91%	0.02%	0.44%
30+	-0.94%	-0.04%	0.21%

The assumed merit increase for active judge members is 0.0%.

For a complete table of rates, please refer to the 2016 Experience Study for the System, published in July 2017.

Unused Sick Leave

Members covered by the provision allowing unused sick leave to be used to increase final average salary are assumed to receive increases in their final average salary in accordance with the table below. This adjustment is not applied to disability benefits. Effective dates for the current assumption are shown in the table.

Unused Sick Leave		Valuation year adopted
Actives		
• State General Service Male	6.25%	2010
• State General Service Female	3.75%	2010
• School District Male	7.50%	2016
• School District Female	5.75%	2012
• Local General Service Male	4.75%	2012
• Local General Service Female	3.25%	2014
• State Police & Fire	4.75%	2012
• Local Police & Fire	7.25%	2016
Dormant Members	3.25%	2016

Vacation Pay

Members eligible to receive a lump sum payment of unused vacation pay are assumed to receive increases in their final average salary in accordance with the table below. This adjustment is not applied to disability benefits. These rates were adopted December 31, 2016, except the school district rates which were adopted effective December 31, 2012.

Vacation Pay	
Tier 1	
• State General Service	2.00%
• School District	0.25%
• Local General Service	2.75%
• State Police & Fire	2.50%
• Local Police & Fire	3.75%
Tier 2	0.00%

Retiree Healthcare Participation

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

Retiree Healthcare Participation	
RHIPA	
• 8 – 9 years of service	10.0%
• 10 – 14 years of service	10.0%
• 15 – 19 years of service	18.0%
• 20 – 24 years of service	23.0%
• 25 – 29 years of service	29.0%
• 30+ years of service	38.0%
RHIA	
• Healthy Retired	35.0%
• Disabled Retired	20.0%

The RHIA disabled retired rate was first adopted December 31, 2008. The RHIA healthy retired rate and RHIPA rates for 20 to 24 years of service were adopted December 31, 2016. RHIPA Rates up through 14 years of service were first adopted effective December 31, 2012. All other RHIPA rates were first adopted effective December 31, 2014.

OPSRP

Most of the methods and assumptions adopted for the OPSRP valuation are the same as those used for Tier 1/Tier 2. The methods and assumptions that differ for OPSRP are summarized below. The Board adopted the following methods, procedures and assumptions for the December 31, 2016 and December 31, 2017 actuarial valuations.

Actuarial Methods and Valuation Procedures

OPSRP UAL amortization	The UAL as of December 31, 2007 is amortized as a level percentage of projected combined valuation payroll (Tier 1/ Tier 2 plus OPSRP payroll) over a closed period 16 year period. Gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over 16 years from the valuation in which they are first recognized.

Economic Assumptions

Administrative expenses	$6.5 million per year is added to the normal cost.

Demographic Assumptions

Retirement Assumptions

Rates of Retirement from Active Status

	Police & Fire			General Service			School Districts		
Age	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs
50	0.50%	1.50%	5.50%						
51	0.50%	1.50%	5.50%						
52	0.50%	1.50%	5.50%						
53	0.50%	1.50%	25.00%						
54	0.50%	1.50%	17.50%						
55	2.00%	5.00%	23.50%	1.00%	2.50%	5.00%	1.00%	2.50%	5.00%
56	2.00%	5.00%	23.50%	1.00%	2.50%	5.00%	1.00%	2.50%	5.00%
57	2.00%	5.00%	23.50%	1.00%	2.50%	7.50%	1.00%	2.50%	7.50%
58	4.00%	5.00%	23.50%	1.50%	3.00%	30.00%	1.50%	3.00%	30.00%
59	4.00%	5.00%	23.50%	2.00%	3.00%	25.00%	1.50%	3.00%	25.00%
60	4.00%	15.00%	23.50%	3.00%	3.75%	20.00%	2.50%	3.75%	20.00%
61	4.00%	8.50%	23.50%	3.00%	5.00%	20.00%	3.00%	5.00%	20.00%
62	10.00%	25.00%	38.00%	8.00%	12.00%	30.00%	6.00%	12.00%	30.00%
63	7.00%	17.00%	38.00%	7.00%	10.00%	20.00%	6.00%	10.00%	20.00%
64	7.00%	17.00%	17.00%	7.00%	10.00%	20.00%	6.00%	10.00%	20.00%
65	100.00%	100.00%	100.00%	13.00%	35.00%	20.00%	11.50%	35.00%	20.00%
66				15.50%	33.00%	20.00%	12.50%	33.00%	20.00%
67				15.50%	22.00%	30.00%	11.00%	22.00%	30.00%
68				13.00%	17.00%	20.00%	9.00%	17.00%	20.00%
69				13.00%	17.00%	20.00%	9.00%	17.00%	20.00%
70				100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Retirement from Dormant Status

Dormant members are assumed to retire at their Normal Retirement Age.

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

A summary of key changes implemented since the December 31, 2016 valuation are described briefly below.

Changes in Actuarial Methods and Allocation Procedures

There were no changes to actuarial methods and procedures since the December 31, 2016 valuation.

Changes in Economic Assumptions

There were no changes to economic assumptions since the December 31, 2016 valuation.

Changes in Demographic Assumptions

There were no changes to demographic assumptions since the December 31, 2016 valuation.

Schedule of Active Member Valuation Data

Valuation Date	Count	Annual Payroll (in Thousands)	Average Annual Pay	% Increase in Average Pay	Number of Participating Employers[1]
12/31/2008	170,569	$ 8,130,136	$ 47,665	3.1%	766
12/31/2009	178,606	$ 8,512,192	$ 47,659	0.0%	776
12/31/2010	193,569	$ 8,750,064	$ 45,204	-5.2%	787
12/31/2011	170,972	$ 8,550,511	$ 50,011	10.6%	791
12/31/2012	167,103	$ 8,590,879	$ 51,411	2.8%	798
12/31/2013	162,185	$ 8,671,835	$ 53,469	4.0%	799
12/31/2014	164,859	$ 9,115,767	$ 55,294	3.4%	802
12/31/2015	168,177	$ 9,544,132	$ 56,751	2.6%	804
12/31/2016	172,483	$ 9,872,557	$ 57,238	0.9%	805
12/31/2017	173,002	$ 10,098,889	$ 58,374	2.0%	802

[1] *Effective in 2006, participating employers are defined for this purpose as any employer with covered payroll during the prior year.*

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Annual Allowances are shown in thousands.

	Added to Rolls		Removed from Rolls		Rolls - End of Year			
Valuation Date	Count	Annual Allowances[1]	Count	Annual Allowances	Count	Annual Allowances	% Increase in Annual Allowances[2]	Average Annual Allowances
12/31/2008 [3]	5,963	$ 171,484	3,626	$ 47,062	109,138	$ 2,645,767	4.9%	$ 24,242
12/31/2009 [3]	6,377	$ 226,713	3,374	$ 46,228	112,141	$ 2,826,252	6.8%	$ 25,203
12/31/2010 [3]	6,359	$ 217,424	3,512	$ 51,627	114,988	$ 2,992,048	5.9%	$ 26,021
12/31/2011 [3]	8,715	$ 282,098	3,679	$ 55,633	120,024	$ 3,218,514	7.6%	$ 26,816
12/31/2012 [3]	7,023	$ 235,917	4,875	$ 59,353	122,172	$ 3,395,079	5.5%	$ 27,789
12/31/2013	9,724	$ 307,551	3,644	$ 66,607	128,252	$ 3,636,023	7.1%	$ 28,351
12/31/2014 [4]	6,910	$ 235,250	3,524	$ 66,621	131,638	$ 3,804,651	4.6%	$ 28,902
12/31/2015 [4]	8,566	$ 304,818	3,781	$ 73,305	136,423	$ 4,036,165	6.1%	$ 29,586
12/31/2016 [4]	6,413	$ 242,372	3,931	$ 80,903	138,905	$ 4,197,633	4.0%	$ 30,219
12/31/2017 [4]	10,075	$ 385,197	3,878	$ 83,921	145,102	$ 4,498,910	7.2%	$ 31,005

[1] *Additions to annual allowances reflect the combined effects of new retirements and COLA increases since the previous valuation date.*

[2] *Since last valuation date.*

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

[4] *Annual allowances reflect estimated adjustments to retiree benefits for the Moro v. State of Oregon decision for records that were not already adjusted in the data provided.*

Schedules of Funding Progress by Rate Pool

(dollar amounts in millions)

Actuarial Valuation Date		Actuarial Value of Assets[1,2] (a)	Actuarial Accrued Liability (AAL)[2] (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll[3] (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Tier 1/Tier 2 State & Local Government Rate Pool							
12/31/2012	4	$ 28,022.3	$ 30,601.9	$ 2,579.5	91.6%	$ 3,043.7	84.7%
12/31/2013	5	$ 30,590.2	$ 31,738.8	$ 1,148.6	96.4%	$ 2,915.9	39.4%
12/31/2014	6	$ 31,162.6	$ 37,169.9	$ 6,007.3	83.8%	$ 2,827.9	212.4%
12/31/2015	5	$ 30,185.3	$ 38,396.8	$ 8,211.5	78.6%	$ 2,691.8	305.1%
12/31/2016		$ 30,417.6	$ 40,351.3	$ 9,933.7	75.4%	$ 2,546.7	390.1%
12/31/2017	5	$ 33,366.0	$ 42,150.7	$ 8,784.7	79.2%	$ 2,410.6	364.4%
Tier 1/Tier 2 School District Rate Pool							
12/31/2012	4	$ 21,202.1	$ 22,908.0	$ 1,705.8	92.6%	$ 1,769.0	96.4%
12/31/2013		$ 23,063.3	$ 23,392.6	$ 329.4	98.6%	$ 1,663.0	19.8%
12/31/2014	6	$ 23,361.2	$ 27,059.9	$ 3,698.7	86.3%	$ 1,626.0	227.5%
12/31/2015		$ 22,728.9	$ 27,670.7	$ 4,941.8	82.1%	$ 1,578.8	313.0%
12/31/2016		$ 22,870.2	$ 29,152.2	$ 6,282.0	78.5%	$ 1,532.7	409.9%
12/31/2017		$ 24,934.4	$ 29,677.4	$ 4,743.1	84.0%	$ 1,443.7	328.5%
Tier 1/Tier 2 Independent Employers and Judiciary							
12/31/2012	4	$ 4,479.4	$ 5,043.4	$ 564.0	88.8%	$ 529.0	106.6%
12/31/2013	5	$ 4,851.0	$ 5,164.3	$ 313.3	93.9%	$ 494.8	63.3%
12/31/2014	6	$ 4,967.4	$ 6,104.9	$ 1,137.4	81.4%	$ 479.2	237.4%
12/31/2015	5	$ 4,807.6	$ 6,327.1	$ 1,519.5	76.0%	$ 460.3	330.1%
12/31/2016		$ 4,856.6	$ 6,690.8	$ 1,834.3	72.6%	$ 437.3	419.5%
12/31/2017	5	$ 5,018.2	$ 6,536.3	$ 1,518.1	76.8%	$ 392.6	386.7%
OPSRP Rate Pool							
12/31/2012	4	$ 1,190.0	$ 1,795.6	$ 605.5	66.3%	$ 3,249.2	18.6%
12/31/2013		$ 1,630.2	$ 2,243.3	$ 613.2	72.7%	$ 3,598.1	17.0%
12/31/2014	6	$ 2,024.6	$ 3,064.1	$ 1,039.5	66.1%	$ 4,182.7	24.9%
12/31/2015		$ 2,389.1	$ 3,742.5	$ 1,353.5	63.8%	$ 4,813.3	28.1%
12/31/2016		$ 3,021.4	$ 4,717.0	$ 1,695.6	64.1%	$ 5,355.8	31.7%
12/31/2017		$ 4,116.5	$ 5,634.7	$ 1,518.2	73.1%	$ 5,852.0	25.9%
Postemployment Healthcare Benefits - Retirement Health Insurance Account							
12/31/2012		$ 291.6	$ 471.8	$ 180.2	61.8%	$ 5,341.7	3.4%
12/31/2013		$ 353.5	$ 473.6	$ 120.0	74.7%	$ 5,073.7	2.4%
12/31/2014		$ 395.9	$ 468.4	$ 72.5	84.5%	$ 4,933.1	1.5%
12/31/2015		$ 419.3	$ 465.6	$ 46.3	90.0%	$ 4,730.8	1.0%
12/31/2016		$ 465.0	$ 463.7	$ (1.3)	100.3%	$ 4,516.7	(0.0%)
12/31/2017		$ 553.3	$ 437.6	$ (115.7)	126.4%	$ 4,246.9	(2.7%)
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account							
12/31/2012		$ 4.4	$ 60.3	$ 55.9	7.4%	$ 1,478.4	3.8%
12/31/2013		$ 5.2	$ 61.2	$ 55.9	8.6%	$ 1,434.5	3.9%
12/31/2014		$ 7.2	$ 70.5	$ 63.3	10.2%	$ 1,406.3	4.5%
12/31/2015		$ 11.2	$ 67.8	$ 56.6	16.5%	$ 1,339.4	4.2%
12/31/2016		$ 19.1	$ 67.9	$ 48.8	28.1%	$ 1,276.0	3.8%
12/31/2017		$ 29.8	$ 69.4	$ 39.5	43.0%	$ 1,212.2	3.3%

Notes:

[1] *Side account assets are included with Tier 1/Tier 2 assets.*

[2] *Excludes effect of Multnomah Fire District (net UAAL of $166 million as of 12/31/2017).*

[3] *Covered payroll shown is payroll for members of the rate pool benefiting from the specified program. For example, Tier 1/Tier 2 School District payroll is only payroll for Tier 1/Tier 2 members and excludes OPSRP. However, UAL is amortized using combined Tier 1/Tier 2 and OPSRP payroll.*

[4] *Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.*

[5] *The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 822 and 861, as well as a change in cost method to Entry Age Normal.*

[6] *The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in Moro v. State of Oregon, which overturned portions of Senate Bills 822 and 861.*

Analysis of Financial Experience

(dollar amounts in millions)

Tier 1/Tier 2 Pension Program	$ Gain (or Loss) for Year 2017	2016
Type of Activity		
Retirements from Active Status	$ (145.1)	$ 66.9
Active Mortality and Withdrawal	(12.5)	(65.7)
Pay Increases	(70.7)	36.6
Contributions	49.4	78.4
Interest Crediting Experience	(95.7)	(5.4)
Investment Income	4,496.6	(46.8)
Retirement, Mortality and Lump Sums from Dormant Status	15.9	(1.8)
Retiree and Beneficiary Mortality	(34.6)	(6.5)
New Entrants	(1.2)	(0.5)
Other	(297.0)	7.8
Gain (or Loss) During Year From Financial Experience	**$ 3,905.1**	**$ 62.9**
Non-Recurring Items		
Assumption Changes	0.0	(2,096.4)
Plan Changes	0.0	0.0
Composite Gain (or Loss) During Year	**$ 3,905.1**	**$ (2,033.5)**

OPSRP Pension Program	$ Gain (or Loss) for Year 2017	2016
Retirements from Active Status	$ 1.1	$ 2.1
Active Mortality and Withdrawal	10.2	(22.7)
Pay Increases	(97.7)	0.4
Contributions	41.6	18.0
Investment Income	317.5	9.5
Retirement, Mortality and Lump Sums from Dormant Status	2.0	1.3
Retiree and Beneficiary Mortality	(0.1)	0.6
New Entrants	(67.1)	(79.7)
Other	42.0	(18.4)
Gain (or Loss) During Year From Financial Experience	**$ 249.7**	**$ (88.8)**
Non-Recurring Items		
Assumption Changes	0.0	(173.7)
Plan Changes	0.0	0.0
Composite Gain (or Loss) During Year	**$ 249.7**	**$ (262.5)**

Analysis of Financial Experience (continued)

(dollar amounts in millions)

Retiree Healthcare Programs	$ Gain (or Loss) for Year			
	RHIA		RHIPA	
	2017	2016	2017	2016
Contributions	$ 2.4	(0.8)	$ 0.9	$ 2.9
Investment Income	38.7	(1.0)	1.3	(0.2)
Other	29.0	8.2	0.2	2.7
Gain (or Loss) During Year From Financial Experience	**$ 70.2**	**$ 6.4**	**$ 2.3**	**$ 5.4**
Non-Recurring Items				
Assumption Changes	0.0	(1.5)	0.0	(0.7)
Plan Changes	0.0	0.0	0.0	0.0
Composite Gain (or Loss) During Year	**$ 70.2**	**$ 4.9**	**$ 2.3**	**$ 4.8**

Solvency Test

(dollar amounts in millions)

Tier 1/Tier 2 Pension

Valuation Date[2]	Actuarial Accrued Liability[1] Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets[1,3]	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2012 [4]	$ 7,704.9	$ 36,377.3	$ 14,527.4	$ 53,594.0	100%	100%	65%
12/31/2013 [5]	$ 7,120.1	$ 39,116.2	$ 14,114.1	$ 58,384.0	100%	100%	86%
12/31/2014 [6]	$ 6,950.4	$ 46,113.5	$ 17,331.0	$ 59,370.6	100%	100%	36%
12/31/2015 [5]	$ 6,476.8	$ 48,641.5	$ 17,335.7	$ 57,611.0	100%	100%	14%
12/31/2016	$ 6,168.1	$ 51,655.5	$ 18,429.6	$ 58,037.6	100%	100%	1%
12/31/2017 [5]	$ 5,585.9	$ 54,967.4	$ 17,868.1	$ 63,209.7	100%	100%	15%

[1] *Includes effect of Multnomah Fire District (net UAAL of $166 million as of 12/31/2017).*

[2] *An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.*

[3] *Includes the value of UAL Lump Sum Side Accounts.*

[4] *The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 822 and 861, as well as a change in cost method to Entry Age Normal.*

[5] *Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.*

[6] *The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in Moro v. State of Oregon, which overturned portions of Senate Bills 822 and 861.*

OPSRP Pension

Valuation Date[1]	Actuarial Accrued Liability Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2012 [2]	$ 0.0	$ 28.6	$ 1,766.9	$ 1,190.0	100%	100%	66%
12/31/2013	$ 0.0	$ 51.2	$ 2,192.1	$ 1,630.2	100%	100%	72%
12/31/2014 [3]	$ 0.0	$ 92.4	$ 2,971.6	$ 2,024.6	100%	100%	65%
12/31/2015	$ 0.0	$ 144.6	$ 3,597.9	$ 2,389.1	100%	100%	62%
12/31/2016	$ 0.0	$ 201.1	$ 4,515.9	$ 3,021.4	100%	100%	62%
12/31/2017	$ 0.0	$ 310.1	$ 5,324.5	$ 4,116.5	100%	100%	71%

[1] *An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.*

[2] *The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 822 and 861, as well as a change in cost method to Entry Age Normal.*

[3] *The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in Moro v. State of Oregon, which overturned portions of Senate Bills 822 and 861.*

Solvency Test

(dollar amounts in millions)

Retiree Health Insurance Account (RHIA)							
	Actuarial Accrued Liability						
Valuation Date[1]	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2012 [2]	$ 0.0	$ 338.3	$ 133.5	$ 291.6	100%	86%	0%
12/31/2013	$ 0.0	$ 348.0	$ 125.6	$ 353.5	100%	100%	4%
12/31/2014	$ 0.0	$ 355.1	$ 113.3	$ 395.9	100%	100%	36%
12/31/2015	$ 0.0	$ 357.7	$ 107.9	$ 419.3	100%	100%	57%
12/31/2016	$ 0.0	$ 361.7	$ 102.0	$ 465.0	100%	100%	101%
12/31/2017	$ 0.0	$ 343.9	$ 93.7	$ 553.3	100%	100%	224%

[1] *An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.*

[2] *The 12/31/2012 valuation reflects a change in cost method to Entry Age Normal.*

Retiree Health Insurance Premium Account (RHIPA)							
	Actuarial Accrued Liability						
Valuation Date[1]	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2012 [2]	$ 0.0	$ 15.1	$ 45.3	$ 4.4	100%	29%	0%
12/31/2013	$ 0.0	$ 16.1	$ 45.1	$ 5.2	100%	33%	0%
12/31/2014	$ 0.0	$ 15.7	$ 54.9	$ 7.2	100%	46%	0%
12/31/2015	$ 0.0	$ 14.9	$ 52.9	$ 11.2	100%	75%	0%
12/31/2016	$ 0.0	$ 14.4	$ 53.5	$ 19.1	100%	100%	9%
12/31/2017	$ 0.0	$ 15.4	$ 54.0	$ 29.8	100%	100%	27%

[1] *An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.*

[2] *The 12/31/2012 valuation reflects a change in cost method to Entry Age Normal.*

Plan Summary

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Summary of Plan Provisions

Summary of Plan Provisions

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

Membership	All employees of public employers participating in this System who are in qualifying positions become members of the System after completing six months of service except those who are eligible for and have elected to participate in an optional retirement plan. Different benefit provisions of the plan apply based on date of hire.	
	Tier 1	Hired prior to 1996
	Tier 2	Hired after 1995 and before August 29, 2003
	OPSRP	Hired after August 28, 2003, and neither a judge nor a former Tier 1/Tier 2 member eligible to reestablish Tier 1/Tier 2 membership
	Judges	Members of the State Judiciary
Member Contributions	**Judges**	7% of salary
	All others	None
Employer Contributions	Set by the PERS Board based on actuarial calculations that follow Board rate-setting policies for employers.	

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

Normal Retirement Date	**Police and Fire**	Age 55
	Judges	Age 65
	Tier 1 General Service	Age 58
	Tier 2 General Service	Age 60

Normal Retirement Allowance

For Members who are not Judges, the greatest of the Full Formula benefit, the Money Match benefit, or the Formula Plus Annuity benefit (only available to Members who made contributions before August 21, 1981). For Members with 15 or more years of creditable service, the benefit will not be less than the minimum service retirement allowance of $100 per month, as described in ORS 238.310.

Full Formula The percentage multiplier from the table below multiplied by final average salary and years of creditable service plus a prior service pension, if applicable.

Percentage Multiplier	Membership Classification
2.00%	Fire, Police and Legislators
1.67%	All other members

Money Match The Member's account balance and a matching employer amount converted to an actuarially equivalent annuity.

Formula Plus Annuity The Member's account balance converted to an actuarially equivalent cash refund annuity plus the percentage multiplier from the table below multiplied by final average salary and years of creditable service, plus a prior service pension, if applicable.

Percentage Multiplier	Membership Classification
1.35%	Fire, Police and Legislators
1.00%	All other members

Normal Retirement Allowance (continued)	**Judges**	Final average salary multiplied by the first percentage multiplier from the table below for up to 16 years of service plus the second percentage multiplier for any service in excess of 16 years, but not to exceed the maximum percentage of final average salary also shown below. Judges must elect Plan A or Plan B no later than age 60. A "Plan B" judge must serve as a pro tem judge for a total of 175 days postretirement.

Plan	Percentage Factor (up to 16 years)	Percentage Factor (after 16 years)	Maximum Percentage of Final Average Salary
A	2.8125%	1.67%	65%
B	3.75%	2.00%	75%

Final Average Salary

The greater of:

- Average salary earned during the three calendar years in which the member was paid the highest salary, even if one of those years is less than a full calendar year.
- Total salary earned over the last 36 months of employment divided by the actual months of service during that 36 month period.

Covered salary for this purpose includes the value of member contributions assumed and paid by employers, any payment due to an employer's participation in the Unused Sick Leave program, and, for Tier 1 members, lump sum payment of unused vacation time.

Creditable Service

The number of years and months an active Member is paid a salary by a participating PERS employer and PERS benefits are being funded.

Prior Service Pension

Benefits payable on account of Prior Service Credit for a member's service with a participating employer prior to the employer's participation in PERS, as described in ORS 238.442.

SB 656/HB 3349 Adjustment

All members receive an increase to their monthly retirement benefit equal to the greater of the increase under Senate Bill 656 (SB 656) or House Bill 3349 (HB 3349). The adjustment for SB 656 only applies to members who established membership prior to July 14, 1995. Senate Bill 822, enacted in 2013, limits eligibility for these adjustments to only PERS beneficiaries who pay Oregon state income tax.

SB 656 Increase

Years of Service	General Service	Police & Fire
0-9	0.0%	0.0%
10-14	1.0	1.0
15-19	1.0	1.0
20-24	2.0	2.5
25-29	3.0	4.0
30 & Over	4.0	4.0

HB 3349 Increase

$$\left(\frac{1}{1 - \text{maximum Oregon personal income tax rate (limited to 9\%)}} - 1 \right) \times \frac{\text{Service prior to October 1, 1991}}{\text{All Service}}$$

Early Retirement Eligibility	**Police and Fire**	Age 50 or 30 years of service
	Judges	Age 60
	General Service	Age 55 or 30 years of service
Early Retirement Allowance	Normal retirement allowance, actuarially reduced to early retirement age. However, there is no reduction applied if a member has completed 30 years of service (25 years for police & fire members) or for judges in Plan B.	
Vesting	Contributions made in any part of five calendar years or attainment of age 50 (45 for police & fire) while working in a qualifying position.	
Termination Benefits	**Non-Vested**	Payment of member's account balance.
	Vested	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.
Optional Forms of Retirement Allowance	The normal form of benefit is a cash refund annuity (joint and two-thirds survivor contingent annuity for a married judge). All optional amounts are adjusted to be actuarially equivalent. **Options Available** • Life annuity • Cash refund annuity • Life annuity guaranteed 15 years • Joint and 50% or 100% survivor contingent annuity, with or without pop-up feature • Partial Lump Sum: Refund of member contribution account balance plus a pension (under any optional form) of employer-paid portion of the Full Formula or Money Match annuity. • Total Lump Sum: Refund of member contribution account plus a matching employer amount.	
Preretirement Death Benefit Eligibility	**Judges**	Six or more years of service.
	All others	Death occurring while the member is an employee of a participating employer or within 120 days of termination provided the employee does not withdraw the account balance or retire, or a result of injuries received while in the service of a participating employer.
Preretirement Death Benefit	**Judges**	The spouse shall receive a life pension equal to two-thirds of the service retirement allowance. The beneficiary of an unmarried judge shall receive the member's accumulated contributions with interest.
	All others	The member's account balance plus a matching employer amount.
Additional Police & Fire Death Benefits	Upon the death of a retired police officer or firefighter, the surviving spouse or dependent children under age 18 will receive a monthly benefit based on 25% of the cash refund retirement allowance due to police and fire service.	
Disability Benefit Eligibility	**Duty**	Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service.
	Non-Duty	Disablement occurring after ten years of service (six years, if a judge), but prior to normal retirement eligibility.

Disability Benefits	The normal retirement allowance calculated based on the service credit that would have been earned if the member had continued working to age 58 (age 55 for police and fire, age 65 for judge members) payable commencing immediately. **Fire and Police Members' Alternative** In lieu of the above, firefighters and police officers who qualify for duty disability may elect to receive a benefit of 50% of final average monthly salary at the time of disablement. **Minimum Monthly Retirement Allowance** Judges .... 45% of final average monthly salary. All others .... \$100 for a member with at least 15 years of creditable service, actuarially reduced if an optional form of benefit is chosen. **Reduction of Benefits** Whenever a disabled employee's disability benefit and earned income for any month exceed the monthly salary received at the time of disablement or \$400, if greater, the disability benefit will be reduced by the excess. For Tier Two members, the disability benefit may not exceed the member's salary at the time of disablement.
Waiting Time Service Purchases	Members with at least 10 years of combined credited and/or prior service under PERS may elect to purchase service credit for the six-month "waiting time" period worked prior to establishing membership in the system. The waiting time purchase is interest-free and must be purchased in one payment prior to retirement.
Police & Fire Unit Purchases	Police & fire members may purchase 60-month annuity benefits (up to \$80 per month) that must be paid out by age 65 and cannot commence prior to the earliest retirement age. The amount purchased by the member is matched by the employer. In certain situations, such as termination of employment prior to retiring, or working beyond age 65, the employer's matching purchase is forfeited.
Automatic Postretirement Cost of Living Adjustments (COLAs)	All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in *Moro v. State of Oregon*, automatic postretirement adjustments are based on a blended COLA as described below. **Automatic COLA prior to SB 822 and SB 861**: Benefits were adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics. The maximum adjustment to be made for any year was 2% of the previous year's benefit. Any CPI change in excess of the limit was accumulated for future benefit adjustments which would otherwise be less than the limit. No benefit was decreased below its original amount. **Automatic Adjustments Provided by Senate Bills 822 and 861**: This legislation, passed in 2013, provided for that benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first \$60,000 of annual benefit and 0.15% on amounts above \$60,000 of annual benefit.

	Blended COLA after *Moro* decision	The Supreme Court decision in *Moro* requires that members "will be entitled to receive during retirement a blended COLA rate that reflects the different COLA provisions applicable to benefits earned at different times." The Supreme Court did not articulate a specific methodology for determining the blended COLA. For purposes of this valuation, we have determined the blend based on creditable service earned before and after October 2013. This approach is consistent with OAR 459-005-0510 adopted by the PERS Board in September 2015.
Ad Hoc Adjustments	From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits.	
Variable Annuity Program	**Contributions**	Prior to January 1, 2004, a member could elect to have 25, 50 or 75 percent of his or her contributions invested in the variable account.
	Benefit	At retirement, a member may elect to receive a variable annuity with the funds accumulated in his or her variable account. Alternatively, a member may elect to have all or a portion of the funds in his or her variable account transferred back to the regular account and receive an annuity from the System as though no variable annuity program existed. The employer-provided benefit, however, is based on the earnings the member would have received in the regular account.
Interest Credit on Member Accounts	**Tier 1 Regular**	Actuarially assumed rate of return until the rate guarantee reserve has been fully funded for three consecutive years and the Board elects to credit additional interest.
	Tier 2 Regular	Amount determined by the Board based on actual investment earnings of the regular account.
	Variable	Actual earnings in variable account.
Retiree Healthcare – Medicare Supplement (RHIA)	**Retiree Eligibility**	All of the following must be met: (a) Currently receiving a retirement allowance from the System, (b) Covered for eight years before retirement, (c) Enrolled in a PERS-sponsored health plan, and (d) Enrolled in both Medicare Part A and Part B.
	Surviving Spouse or Dependent Eligibility	A surviving spouse or dependent of a deceased RHIA-eligible retiree is eligible for RHIA benefits if they are enrolled in both Medicare Part A and Part B, and *either* of the following criteria are met: (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health insurance at the time of the retiree's death and the deceased retiree retired before May 1, 1991.

	Benefit Amount	A monthly contribution of up to $60 per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.
Retiree Healthcare – Under Age 65 (RHIPA)	**Retiree Eligibility**	Retired PERS members who were state employees at the time of retirement, are enrolled in a PERS-sponsored health plan, and are not eligible for Medicare.
	Surviving Spouse or Dependent Eligibility	A surviving spouse or dependent of a deceased RHIPA-eligible retiree is eligible for RHIPA benefits if they are not yet eligible for Medicare, and *either* of the following criteria are met: (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health plan at the time of the retiree's death and the deceased retiree retired on or after September 29, 1991.
	Benefit	A percentage (as shown in the table below) of the maximum monthly subsidy based on years of service. The maximum monthly subsidy is calculated annually as the average difference between the health insurance premiums paid by active state employees and the premium retirees would pay if they were rated separately from active state employees. The maximum monthly subsidy for 2018 is $385.35 per month.

Years of Service with State Employer	Subsidized Amount
Under 8	0%
8-9	50%
10-14	60%
15-19	70%
20-24	80%
25-29	90%
30 & Over	100%

Changes in Plan Provisions	There were no changes in the Tier 1/Tier 2 benefit provisions reflected since the December 31, 2016 actuarial valuation.

Summary of Chapter 238A Provisions — OPSRP

Normal Retirement Date	**Police & Fire**	Age 60 or age 53 with 25 years of retirement credit
	General Service	Age 65 or age 58 with 30 years of retirement credit
	School Districts	Age 65 or age 58 with 30 calendar years of active membership
Normal Retirement Allowance	A single life annuity equal to final average salary times years of retirement credit attributable to service as fire and police times 1.8% plus final average salary times all other years of retirement credit times 1.5%	
Final Average Salary	The greater of: • Average salary earned during the three calendar years in which the member was paid the highest salary, even if one of those years is less than a full calendar year. • Total salary earned over the last 36 months of employment divided by the actual months of service during that 36 month period. Covered salary for this purpose includes base pay, plus overtime up to an average amount, plus bonuses, plus member contributions paid by the employer on a salary reduction basis. Excludes payments of unused vacation or accumulated sick leave at retirement, and member contributions "assumed and paid" by the employer.	
Early Retirement Eligibility	**Police & Fire**	Age 50 and 5 years of vesting service
	General Service	Age 55 and 5 years of vesting service
Early Retirement Allowance	Normal retirement allowance, actuarially reduced to early retirement age.	
Vesting	Five years or attainment of normal retirement age.	
Vested Termination Benefit	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.	
Optional Forms of Retirement Benefit	The normal form of benefit is a life annuity. All optional amounts are adjusted to be actuarially equivalent. **Options Available** • Life annuity • Joint and 50% or 100% survivor contingent benefit, with or without pop-up feature • Lump sum if monthly normal retirement benefit is less than $200 or if lump sum value is less than $5,000.	
Preretirement Death Benefit Eligibility	Death of a vested member before retirement benefits begin.	
Preretirement Death Benefit	If member was eligible for early retirement, the actuarial equivalent of 50% of the early retirement benefit the participant was eligible to receive at date of death. If member was not eligible for early retirement, the actuarial equivalent of 50% of the early retirement benefit the participant would have been eligible to receive if he terminated employment on his date of death and retired at the earliest possible date.	

Disability Benefit Eligibility	**Duty**	Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service.
	Non-Duty	Disablement occurring after ten years of service, but prior to normal retirement eligibility.
Disability Benefit Amounts	**Preretirement Benefit**	45% of salary during last full month of employment before disability, reduced if the total benefit exceeds 75% of salary. Benefit is payable monthly until normal retirement age.
	Retirement Benefit	Same formula as Normal Retirement Benefit, except: Final average salary is adjusted to reflect cost-of-living increases from date of disability to normal retirement age, and Retirement credits continue to accrue from date of disability to normal retirement age.
Postretirement Adjustments	All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in *Moro v. State of Oregon*, automatic postretirement adjustments are based on a blended COLA as described below.	
	Automatic COLA prior to SB 822 and SB 861	Benefits were adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics. The maximum adjustment to be made for any year was 2% of the previous year's benefit. Any CPI change in excess of the limit was accumulated for future benefit adjustments which would otherwise be less than the limit. No benefit was decreased below its original amount.
	Automatic Adjustments Provided by Senate Bills 822 and 861	This legislation, passed in 2013, provided for that benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first $60,000 of annual benefit and 0.15% on amounts above $60,000 of annual benefit.
Changes in Plan Provisions	There were no changes in the OPSRP benefit provisions reflected since the December 31, 2016 actuarial valuation.	

STATISTICAL SECTION

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Statistical Notes

The statistical section of the Oregon Public Employees Retirement System (PERS or the System) CAFR presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the System's overall financial health. The data presented was extracted from the PERS' information systems.

Financial Trends

These schedules contain trend information to help the reader understand how the System's financial performance and wellbeing have changed over time. Financial information is presented on an accrual basis.

The Schedules of Additions by Source, Deductions by Type, and Changes in Fiduciary Net Position are presented on both a fiscal and calendar year basis. The System prepares its financial statements on a fiscal-year basis but has its actuarial valuations performed on a calendar-year basis.

The Schedule of Benefit Expenses by Type provides additional detail of benefit expense for fiscal years reported in the aggregate in the Schedules of Deductions by Type.

The Schedule of Earnings and Crediting at December 31 shows earnings available for crediting net of administrative expenses and the rates approved by the Board for the programs it administers.

Operating Information

These schedules contain data to help illustrate how the information in the System's financial reports relates to the services the System provides and the activities it performs.

The Schedule of Average OPEB Benefits for Retirement Health Insurance Account and Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account show the average monthly other postemployment healthcare benefits, and the number of retirees receiving benefits under each plan.

The Schedule of Average Defined Benefit Pension Payments presents average monthly benefits, final average salary, and number of retirees still receiving benefits, by year of retirement.

The Schedule of Benefit Recipients by Benefit Type shows retired members by benefit level, benefit type, and payment option selected.

The Schedule of Retirement System Membership shows demographics of membership over a period of time. The fiscal year schedule shows membership over the last seven years. The calendar-year schedule is in five-year increments going back to 1985.

The Schedule of Principal Participating Employers shows the 10 employers with the largest number of current employees, along with aggregate information for the remaining employers with current employees.

The Schedule of Participating Employers lists all employers as of June 30, 2018, to show public employers of the state of Oregon participating in PERS.

Additions by Source - Retirement Programs
For the Last Ten Years Ended June 30:

Defined Benefit Pension Plan

Fiscal Year	Member Contributions	Employer Contributions: Dollars [1]	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total[1]
2009	$ 8,452,030	$ 649,706,891	7.88 %	$ (12,903,220,545)	$ (12,245,061,624)
2010	13,600,476	433,268,434	4.88	7,279,890,664	7,726,759,574
2011	14,024,484	424,101,414	5.30	10,931,390,952	11,369,516,850
2012	16,534,650	1,455,729,689	9.69	380,749,755	1,853,014,094
2013	16,985,722	834,161,587	10.26	6,949,742,064	7,800,889,373
2014	15,319,270	915,236,878	10.54	9,886,700,639	10,817,256,787
2015	13,785,439	1,123,256,703	12.25	2,364,479,372	3,501,521,514
2016	14,214,341	977,332,329	10.37	413,915,853	1,405,462,523
2017	13,177,984	1,022,201,249	10.18	7,660,055,575	8,695,434,808
2018	12,558,631	1,390,111,534	13.84	6,247,472,490	7,650,142,655

Oregon Public Service Retirement Plan
Individual Account Program

Fiscal Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2009	$ 495,933,952	$ N/A	N/A %	$ (553,146,972)	$ (57,213,020)
2010	505,922,492	N/A	N/A	393,651,362	899,573,854
2011	513,715,949	N/A	N/A	735,695,057	1,249,411,006
2012	516,174,983	N/A	N/A	71,535,911	587,710,894
2013	510,796,006	N/A	N/A	635,350,054	1,146,146,060
2014	527,303,202	N/A	N/A	977,439,367	1,504,742,569
2015	563,417,649	N/A	N/A	276,949,224	840,366,873
2016	566,450,233	N/A	N/A	76,509,002	642,959,235
2017	605,277,281	N/A	N/A	948,360,842	1,553,638,123
2018	622,296,460	N/A	N/A	772,501,114	1,394,797,574

Deferred Compensation Plan

Fiscal Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2009	$ 66,727,977	$ N/A	N/A %	$ (142,099,959)	$ (75,371,982)
2010	66,708,970	N/A	N/A	84,417,201	151,126,171
2011	73,291,691	N/A	N/A	176,999,516	250,291,207
2012	80,632,698	N/A	N/A	9,841,830	90,474,528
2013	74,248,188	N/A	N/A	135,572,819	209,821,007
2014	92,174,335	N/A	N/A	203,181,598	295,355,933
2015	99,796,739	N/A	N/A	48,617,428	148,414,167
2016	107,286,636	N/A	N/A	3,166,856	110,453,492
2017	121,701,967	N/A	N/A	189,041,478	310,743,445
2018	134,259,568	N/A	N/A	169,577,769	303,837,337

[1] Amounts and balance restated for fiscal year 2012 due to a prior period adjustment.

Deductions by Type - Retirement Programs
For the Last Ten Years Ended June 30:

Defined Benefit Pension Plan

Fiscal Year		Benefits		Administrative Expenses [1]		Refunds		Total[1]
2009	$	2,790,218,464	$	26,195,676	$	36,548,963	$	2,852,963,103
2010		2,915,568,801		28,512,343		25,692,404		2,969,773,548
2011		3,203,938,769		29,256,747		26,487,226		3,259,682,742
2012		3,295,709,818		33,102,667		34,020,450		3,362,832,935
2013		3,556,059,999		33,505,928		17,439,568		3,607,005,495
2014		3,837,870,411		31,247,350		25,560,094		3,894,677,855
2015		3,927,167,032		35,739,837		16,481,215		3,979,388,084
2016		4,193,307,712		40,567,225		13,154,578		4,247,029,515
2017		4,346,282,735		43,546,184		15,961,744		4,405,790,663
2018		4,642,717,844		37,751,319		13,876,294		4,694,345,457

Oregon Public Service Retirement Plan
Individual Account Program

Fiscal Year		Benefits		Administrative Expenses		Refunds		Total
2009	$	49,534,423	$	8,413,392	$	N/A	$	57,947,815
2010		72,802,216		7,673,682		N/A		80,475,898
2011		133,970,603		6,810,487		N/A		140,781,090
2012		224,729,644		7,698,098		N/A		232,427,742
2013		241,326,511		7,093,871		N/A		248,420,382
2014		330,535,801		6,934,980		N/A		337,470,781
2015		319,978,740		7,565,611		N/A		327,544,351
2016		364,549,091		8,478,008		N/A		373,027,099
2017		417,119,098		9,481,014		N/A		426,600,112
2018		546,866,343		12,309,768		N/A		559,176,111

Deferred Compensation Plan

Fiscal Year		Benefits		Administrative Expenses		Refunds		Total
2009	$	38,858,335	$	816,033	$	N/A	$	39,674,368
2010		45,901,913		889,647		N/A		46,791,560
2011		55,929,452		1,326,224		N/A		57,255,676
2012		61,465,377		417,776		N/A		61,883,153
2013		70,550,942		874,584		N/A		71,425,526
2014		89,652,030		997,202		N/A		90,649,232
2015		84,177,564		1,018,468		N/A		85,196,032
2016		91,351,490		1,202,786		N/A		92,554,276
2017		97,089,531		1,330,947		N/A		98,420,478
2018		116,331,317		1,469,816		N/A		117,801,133

[1]Amount and balance restated for fiscal year 2009 due to a prior period adjustment.

Changes in Fiduciary Net Position - Retirement Programs
For the Last Ten Years Ended June 30:

Defined Benefit Pension Plan

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2009	$ (12,245,061,624)	$ 2,852,963,103	$ (15,098,024,727)	$ 58,026,053,288	$ 42,928,028,561
2010	7,726,759,574	2,969,773,548	4,756,986,026	42,928,028,561	47,685,014,587
2011	11,369,516,850	3,259,682,742	8,109,834,108	47,685,014,587	55,794,848,695
2012	1,853,014,094	3,362,832,935	(1,509,818,841)	55,794,848,695	54,285,029,854
2013	7,800,889,373	3,607,005,495	4,193,883,878	54,285,029,854	58,478,913,732
2014	10,817,256,787	3,894,677,855	6,922,578,932	58,478,913,732	65,401,492,664
2015	3,501,521,514	3,979,388,084	(477,866,570)	65,401,492,664	64,923,626,094
2016	1,405,462,523	4,247,029,515	(2,841,566,992)	64,923,626,094	62,082,059,102
2017	8,695,434,808	4,405,790,663	4,289,644,145	62,082,059,102	66,371,703,247
2018	7,650,142,655	4,694,345,457	2,955,797,198	66,371,703,247	69,327,500,445

Oregon Public Service Retirement Plan
Individual Account Program

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2009	$ (57,213,020)	$ 57,947,815	$ (115,160,835)	$ 2,224,269,611	$ 2,109,108,776
2010	899,573,854	80,475,898	819,097,956	2,109,108,776	2,928,206,732
2011	1,249,411,006	140,781,090	1,108,629,916	2,928,206,732	4,036,836,648
2012	587,710,894	232,427,742	355,283,152	4,036,836,648	4,392,119,800
2013	1,146,146,060	248,420,382	897,725,678	4,392,119,800	5,289,845,478
2014	1,504,742,569	337,470,781	1,167,271,788	5,289,845,478	6,457,117,266
2015	840,366,873	327,544,351	512,822,522	6,457,117,266	6,969,939,788
2016	642,959,235	373,027,099	269,932,136	6,969,939,788	7,239,871,924
2017	1,553,638,123	426,600,112	1,127,038,011	7,239,871,924	8,366,909,935
2018	1,394,797,574	559,176,111	835,621,463	8,366,909,935	9,202,531,398

Deferred Compensation Plan

Fiscal Year	Additions	Deductions	Net Change	Net Position[1] Beginning of Year	Net Position[1] End of Year
2009	$ (75,371,982)	$ 39,674,368	$ (115,046,350)	$ 922,652,464	$ 807,606,114
2010	151,126,171	46,791,560	104,334,611	807,606,114	911,940,725
2011	250,291,207	57,255,676	193,035,531	911,940,725	1,104,976,256
2012	90,474,528	61,883,153	28,591,375	1,104,976,256	1,133,567,631
2013	209,821,007	71,425,526	138,395,481	1,133,567,631	1,271,963,112
2014	295,355,933	90,649,232	204,706,701	1,271,963,112	1,476,669,813
2015	148,414,167	85,196,032	63,218,135	1,476,669,813	1,539,887,948
2016	110,453,492	92,554,276	17,899,216	1,539,887,948	1,557,787,164
2017	310,743,445	98,420,478	212,322,967	1,557,787,164	1,770,110,131
2018	303,837,337	117,801,133	186,036,204	1,770,110,131	1,956,146,335

[1]Balances are restated for fiscal years 2009 and 2012 due to prior period adjustments.

Additions by Source - OPEB
For the Last Ten Years Ended June 30:

Retirement Health Insurance Account

Fiscal Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2009	$ N/A	$ 28,812,705	0.37 %	$ (52,278,868)	$ (23,466,163)
2010	N/A	22,351,240	0.29	31,145,418	53,496,658
2011	N/A	22,176,966	0.29	47,359,659	69,536,625
2012	N/A	46,464,958	0.54	3,023,553	49,488,511
2013	N/A	47,294,060	0.57	35,636,711	82,930,771
2014	N/A	48,253,398	0.56	56,194,217	104,447,615
2015	N/A	53,648,437	0.59	15,606,876	69,255,313
2016	N/A	44,587,963	0.47	4,246,552	48,834,515
2017	N/A	49,785,501	0.50	57,566,224	107,351,725
2018	N/A	47,997,918	0.48	50,869,212	98,867,130

Retiree Health Insurance Premium Account

Fiscal Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2009	$ N/A	$ 2,005,173	0.10 %	$ (1,578,384)	$ 426,789
2010	N/A	1,496,640	0.08	939,274	2,435,914
2011	N/A	1,428,453	0.08	1,135,114	2,563,567
2012	N/A	3,378,230	0.13	16,723	3,394,953
2013	N/A	3,443,805	0.14	499,279	3,943,084
2014	N/A	6,149,608	0.24	739,056	6,888,664
2015	N/A	6,887,258	0.25	266,949	7,154,207
2016	N/A	10,966,837	0.39	228,057	11,194,894
2017	N/A	11,863,776	0.39	2,027,506	13,891,282
2018	N/A	13,290,145	0.45	2,383,184	15,673,329

Deductions by Type - OPEB
For the Last Ten Years Ended June 30:

Retirement Health Insurance Account

Fiscal Year	Benefits[1]	Administrative Expenses	Refunds	Total
2009	$ 28,262,580	$ 958,311	$ N/A	$ 29,220,891
2010	28,821,539	974,988	N/A	29,796,527
2011	29,251,771	1,039,603	N/A	30,291,374
2012	29,935,920	963,843	N/A	30,899,763
2013	30,777,470	1,149,475	N/A	31,926,945
2014	34,112,567	1,044,937	N/A	35,157,504
2015	31,922,820	1,279,427	N/A	33,202,247
2016	33,602,540	1,256,017	N/A	34,858,557
2017	31,186,802	1,288,059	N/A	32,474,861
2018	32,503,140	1,281,744	N/A	33,784,884

Retiree Health Insurance Premium Account

Fiscal Year	Benefits[1]	Administrative Expenses	Refunds	Total
2009	$ 1,926,236	$ 115,770	$ N/A	$ 2,042,006
2010	2,307,058	103,645	N/A	2,410,703
2011	3,024,382	161,559	N/A	3,185,941
2012	3,885,769	71,981	N/A	3,957,750
2013	4,093,736	169,137	N/A	4,262,873
2014	4,925,743	170,901	N/A	5,096,644
2015	4,230,808	188,598	N/A	4,419,406
2016	4,682,975	259,850	N/A	4,942,825
2017	4,327,944	285,895	N/A	4,613,839
2018	4,659,536	277,596	N/A	4,937,132

[1] Benefit payments paid by RHIA and RHIPA consisted of Healthcare Premium Subsidies exclusively.

Changes in Plan Fiduciary Net Position - OPEB
For the Last Ten Years Ended June 30:

Retirement Health Insurance Account

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2009	$ (23,466,163)	$ 29,220,891	$ (52,687,054)	$ 237,732,701	$ 185,045,647
2010	53,496,658	29,796,527	23,700,131	185,045,647	208,745,778
2011	69,536,625	30,291,374	39,245,251	208,745,778	247,991,029
2012	49,488,511	30,899,763	18,588,748	247,991,029	266,579,777
2013	82,930,771	31,926,945	51,003,826	266,579,777	317,583,603
2014	104,447,615	35,157,504	69,290,111	317,583,603	386,873,714
2015	69,255,313	33,202,247	36,053,066	386,873,714	422,926,780
2016	48,834,515	34,858,557	13,975,958	422,926,780	436,902,738
2017	107,351,725	32,474,861	74,876,864	436,902,738	511,779,602
2018	98,867,130	33,784,884	65,082,246	511,779,602	576,861,848

Retiree Health Insurance Premium Account

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2009	$ 426,789	$ 2,042,006	$ (1,615,217)	$ 7,334,559	5,719,342
2010	2,435,914	2,410,703	25,211	5,719,342	5,744,553
2011	2,563,567	3,185,941	(622,374)	5,744,553	5,122,179
2012	3,394,953	3,957,750	(562,797)	5,122,179	4,559,382
2013	3,943,084	4,262,873	(319,789)	4,559,382	4,239,593
2014	6,888,664	5,096,644	1,792,020	4,239,593	6,031,613
2015	7,154,207	4,419,406	2,734,801	6,031,613	8,766,414
2016	11,194,894	4,942,825	6,252,069	8,766,414	15,018,483
2017	13,891,282	4,613,839	9,277,443	15,018,483	24,295,926
2018	15,673,329	4,937,132	10,736,197	24,295,926	35,032,123

Additions by Source - Retirement Programs
For the Last Ten Years Ended December 31[1]:

Defined Benefit Pension Plan

Calendar Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2008	$ 7,316,509	$ 639,128,268	7.86 %	$ (16,483,601,895)	$ (15,837,157,118)
2009	11,209,060	561,305,422	6.59	8,054,309,024	8,626,823,506
2010	14,327,206	411,590,742	4.61	6,018,828,853	6,444,746,801
2011	15,771,376	593,451,757	6.85	1,189,044,156	1,798,267,289
2012	14,148,372	862,934,319	10.99	7,201,022,711	8,078,105,402
2013	18,664,061	1,496,033,607	17.68	8,595,803,270	10,110,500,938
2014	13,200,528	937,788,619	10.48	4,342,718,450	5,293,707,597
2015	14,362,049	1,127,799,421	12.25	1,232,493,098	2,374,654,568
2016	13,085,105	976,297,293	10.17	4,290,378,888	5,279,761,286
2017	14,668,384	1,179,420,962	10.77	9,343,076,932	10,537,166,278

Oregon Public Service Retirement Plan
Individual Account Program

Calendar Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2008	$ 476,238,379	$ N/A	N/A %	$ (681,055,059)	$ (204,816,680)
2009	504,209,955	N/A	N/A	435,988,065	940,198,020
2010	502,322,036	N/A	N/A	400,883,000	903,205,036
2011	518,199,449	N/A	N/A	96,058,972	614,258,421
2012	499,094,923	N/A	N/A	623,896,684	1,122,991,607
2013	542,566,655	N/A	N/A	814,928,040	1,357,494,695
2014	511,048,423	N/A	N/A	450,087,155	961,135,578
2015	596,936,756	N/A	N/A	140,226,970	737,163,726
2016	597,188,543	N/A	N/A	518,172,223	1,115,360,766
2017	613,683,342	N/A	N/A	1,213,845,362	1,827,528,704

Deferred Compensation Plan

Calendar Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2008	$ 72,316,124	$ N/A	N/A %	$ (268,310,470)	$ (195,994,346)
2009	63,087,307	N/A	N/A	147,674,587	210,761,894
2010	67,994,065	N/A	N/A	82,812,783	150,806,848
2011	75,619,604	N/A	N/A	35,406,816	111,026,420
2012	78,115,678	N/A	N/A	105,067,553	183,183,231
2013	88,901,454	N/A	N/A	207,310,080	296,211,534
2014	92,495,435	N/A	N/A	102,188,822	194,684,257
2015	97,373,493	N/A	N/A	15,087,160	112,460,653
2016	109,040,225	N/A	N/A	83,913,037	192,953,262
2017	120,454,924	N/A	N/A	212,359,507	332,814,431

[1]Calendar year-end information is provided because earnings are distributed as of December 31.

Deductions by Type - Retirement Programs
For the Last Ten Years Ended December 31[1]:

Defined Benefit Pension Plan

Calendar Year		Benefits		Administrative Expenses[2]		Refunds		Total
2008	$	2,784,164,757	$	24,645,591	$	27,117,003	$	2,835,927,351
2009		2,823,723,754		26,011,412		18,269,906		2,868,005,072
2010		3,053,863,566		29,126,521		17,996,148		3,100,986,235
2011		3,351,517,947		29,244,166		38,369,101		3,419,131,214
2012		3,351,430,408		31,807,897		17,970,250		3,401,208,555
2013		3,708,827,767		34,271,919		25,529,913		3,768,629,599
2014		3,888,166,333		35,187,183		17,850,587		3,941,204,103
2015		4,068,416,728		37,333,754		15,932,985		4,121,683,467
2016		4,248,984,127		41,936,746		14,931,267		4,305,852,140
2017		4,495,375,698		41,149,466		14,404,077		4,550,929,241

Oregon Public Service Retirement Plan
Individual Account Program

Calendar Year		Benefits		Administrative Expenses		Refunds		Total
2008	$	58,765,223	$	8,183,279	$	N/A	$	66,948,502
2009		53,171,640		7,905,631		N/A		61,077,271
2010		95,293,228		7,822,430		N/A		103,115,658
2011		196,350,366		8,363,154		N/A		204,713,520
2012		218,180,975		5,528,973		N/A		223,709,948
2013		301,297,929		7,164,598		N/A		308,462,527
2014		332,722,945		7,315,352		N/A		340,038,297
2015		343,688,428		7,746,075		N/A		351,434,503
2016		386,689,618		9,106,820		N/A		395,796,438
2017		497,309,999		9,958,373		N/A		507,268,372

Deferred Compensation Plan

Calendar Year		Benefits		Administrative Expenses		Refunds		Total
2008	$	47,955,641	$	795,233	$	N/A	$	48,750,874
2009		37,366,503		863,699		N/A		38,230,202
2010		46,759,679		804,345		N/A		47,564,024
2011		60,816,774		963,874		N/A		61,780,648
2012		65,498,582		783,755		N/A		66,282,337
2013		79,075,903		982,625		N/A		80,058,528
2014		92,995,075		998,023		N/A		93,993,098
2015		82,398,740		1,050,769		N/A		83,449,509
2016		81,073,521		1,374,662		N/A		82,448,183
2017		101,419,280		1,390,830		N/A		102,810,110

[1]Calendar year-end information is provided because earnings are distributed as of December 31.
[2]Balances are restated for fiscal years 2008 and 2009 due to prior period adjustments.

Changes in Fiduciary Net Position - Retirement Programs
For the Last Ten Years Ended December 31[1]:

Defined Benefit Pension Plan[2]

Calendar Year	Additions	Deductions[4]	Net Change	Net Position[5] Beginning of Year	End of Year
2008	$ (15,837,157,118)	$ 2,835,927,351	$ (18,673,084,469)	$ 62,336,019,531	$ 43,662,935,062
2009	8,626,823,506	2,868,005,072	5,758,818,434	43,662,935,062	49,421,753,496
2010	6,444,746,801	3,100,986,235	3,343,760,566	49,421,753,496	52,765,514,062
2011	1,798,267,289	3,419,131,214	(1,620,863,925)	52,765,514,062	51,144,650,137
2012	8,078,105,402	3,401,208,555	4,676,896,847	51,144,650,137	55,821,546,984
2013	10,110,500,938	3,768,629,598	6,341,871,340	55,821,546,984	62,163,418,324
2014	5,293,707,597	3,941,204,103	1,352,503,494	62,163,400,642	63,515,904,136
2015	2,374,654,568	4,116,424,013	(1,741,769,445)	63,515,904,136	61,774,134,691
2016	5,279,761,286	4,305,852,140	973,909,146	61,774,134,691	62,748,043,837
2017	10,537,166,278	4,551,871,595	5,985,294,683	62,748,043,837	68,733,338,520

Oregon Public Service Retirement Plan[3]
Individual Account Program

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	End of Year
2008	$ (204,816,680)	$ 66,948,502	$ (271,765,182)	$ 2,148,409,862	$ 1,876,644,680
2009	940,198,020	61,077,271	879,120,749	1,876,644,680	2,755,765,429
2010	903,205,036	103,115,658	800,089,378	2,755,765,429	3,555,854,807
2011	614,258,421	204,713,520	409,544,901	3,555,854,807	3,965,399,708
2012	1,122,991,607	223,709,948	899,281,659	3,965,399,708	4,864,681,367
2013	1,357,494,695	308,462,527	1,049,032,168	4,864,681,367	5,913,713,535
2014	961,135,579	340,038,297	621,097,282	5,913,713,535	6,534,810,817
2015	737,163,726	351,434,503	385,729,223	6,534,810,817	6,920,540,040
2016	1,115,360,766	395,796,438	719,564,328	6,920,540,040	7,640,104,368
2017	1,827,528,704	507,268,372	1,320,260,332	7,640,104,368	8,960,364,700

Deferred Compensation Plan

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	End of Year
2008	$ (195,994,346)	$ 48,750,874	$ (244,745,220)	$ 988,916,004	$ 744,170,784
2009	210,761,894	38,230,202	172,531,692	744,170,784	916,702,476
2010	150,806,848	47,564,024	103,242,824	916,702,476	1,019,945,300
2011	111,026,420	61,780,648	49,245,772	1,019,945,300	1,069,191,072
2012	183,183,231	66,282,337	116,900,894	1,069,191,072	1,186,091,966
2013	296,211,534	80,058,528	216,153,006	1,186,091,967	1,402,244,973
2014	194,684,257	93,993,098	100,691,159	1,402,244,973	1,502,936,132
2015	112,460,653	83,449,509	29,011,144	1,502,936,132	1,531,947,276
2016	192,953,262	82,448,183	110,505,079	1,531,947,276	1,642,452,355
2017	332,814,431	102,810,110	230,004,321	1,642,452,355	1,872,456,676

[1]Calendar year-end information is provided because earnings are distributed as of December 31.
[2]House Bill 3262, enacted by the 2005 Oregon Legislature, combined the OPSRP Pension Program with the existing defined benefit plan. Activity since 2004 includes activity of the OPSRP Pension Program.
[3]The Oregon Public Service Retirement Plan was added to the System in January 2004.
[4]Balances are restated for fiscal years 2008 to 2009 due to prior period adjustments.
[5]Balances restated for fiscal years 2013, 2014, and 2017 to correct amounts.

Additions by Source - OPEB
For the Last Ten Years Ended December 31[1]:

Retirement Health Insurance Account

Calendar Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2008	$ N/A	$ 28,043,517	0.34 %	$ (66,077,417)	$ (38,033,900)
2009	N/A	25,863,178	0.31	33,958,964	59,822,142
2010	N/A	22,156,216	0.25	26,075,309	48,231,525
2011	N/A	32,610,644	0.38	5,474,204	38,084,848
2012	N/A	48,118,569	0.59	35,088,054	83,206,623
2013	N/A	47,729,940	0.56	46,420,994	94,150,934
2014	N/A	49,466,294	0.55	25,754,870	75,221,164
2015	N/A	48,846,297	0.59	7,995,269	56,841,566
2016	N/A	48,339,520	0.50	31,003,380	79,342,900
2017	N/A	49,167,576	0.49	72,787,020	121,954,596

Retiree Health Insurance Premium Account

Calendar Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2008	$ N/A	$ 1,867,402	0.08 %	$ (2,004,488)	$ (137,086)
2009	N/A	1,796,343	0.08	1,016,811	2,813,154
2010	N/A	1,458,105	0.06	659,794	2,117,899
2011	N/A	2,347,710	0.10	158,742	2,506,452
2012	N/A	3,450,509	0.15	557,438	4,007,947
2013	N/A	4,708,305	0.19	588,465	5,296,770
2014	N/A	6,378,015	0.24	361,915	6,739,930
2015	N/A	8,747,711	0.25	131,852	8,879,563
2016	N/A	11,621,895	0.40	933,866	12,555,761
2017	N/A	12,646,688	0.43	2,915,300	15,561,988

[1]Calendar year-end information is provided because earnings are distributed as of December 31.

Deductions by Type - OPEB

For the Last Ten Years Ended December 31[1]:

Retirement Health Insurance Account

Calendar Year		Benefits		Administrative Expenses		Refunds		Total
2008	$	27,976,500	$	918,244	$	N/A	$	28,894,744
2009		28,537,920		974,580		N/A		29,512,500
2010		29,066,220		973,329		N/A		30,039,549
2011		29,524,122		1,283,144		N/A		30,807,266
2012		30,375,640		837,282		N/A		31,212,922
2013		31,132,920		1,095,853		N/A		32,228,773
2014		31,636,379		1,167,459		N/A		32,803,838
2015		32,273,928		1,223,215		N/A		33,497,143
2016		32,385,680		1,206,654		N/A		33,592,334
2017		32,438,822		1,275,297		N/A		33,714,119

Retiree Health Insurance Premium Account

Calendar Year		Benefits		Administrative Expenses		Refunds		Total
2008	$	1,902,292	$	101,664	$	N/A	$	2,003,956
2009		2,020,198		113,096		N/A		2,133,294
2010		2,664,123		106,791		N/A		2,770,914
2011		3,547,400		124,769		N/A		3,672,169
2012		3,968,267		134,246		N/A		4,102,513
2013		4,323,159		172,485		N/A		4,495,644
2014		4,615,612		180,524		N/A		4,796,136
2015		4,680,196		214,500		N/A		4,894,696
2016		4,340,503		288,507		N/A		4,629,010
2017		4,578,655		273,005		N/A		4,851,660

[1]Calendar year-end information is provided because earnings are distributed as of December 31.

Change in Fiduciary Net Position - OPEB
For the Last Ten Years Ended December 31[1]:

Retirement Health Insurance Account

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2008	$ (38,033,900)	$ 28,894,744	$ (66,928,644)	$ 250,759,958	$ 183,831,314
2009	59,822,142	29,512,500	30,309,642	183,831,314	214,140,956
2010	48,231,525	30,039,549	18,191,976	214,140,956	232,332,932
2011	38,084,848	30,807,266	7,277,582	232,332,932	239,610,514
2012	83,206,623	31,212,922	51,993,701	239,610,514	291,604,215
2013	94,150,934	32,228,773	61,922,161	291,604,215	353,526,376
2014	75,221,164	32,803,838	42,417,326	353,526,376	395,943,702
2015	56,841,566	33,497,143	23,344,423	395,943,702	419,288,125
2016	79,342,900	33,592,334	45,750,566	419,288,125	465,038,691
2017	121,954,596	33,714,119	88,240,477	465,038,691	553,279,168

Retiree Health Insurance Premium Account

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2008	$ (137,086)	$ 2,003,956	$ (2,141,042)	$ 7,819,315	$ 5,678,273
2009	2,813,154	2,133,294	679,860	5,678,273	6,358,133
2010	2,117,899	2,770,914	(653,015)	6,358,133	5,705,118
2011	2,506,452	3,672,169	(1,165,717)	5,705,118	4,539,401
2012	4,007,946	4,102,513	(94,567)	4,539,401	4,444,834
2013	5,296,770	4,495,644	801,126	4,444,834	5,245,960
2014	6,739,930	4,796,136	1,943,794	5,245,960	7,189,754
2015	8,879,563	4,894,696	3,984,867	7,189,754	11,174,621
2016	12,555,761	4,629,010	7,926,751	11,174,621	19,101,372
2017	15,561,988	4,851,660	10,710,328	19,101,372	29,811,700

[1]Calendar year-end information is provided because earnings are distributed as of December 31.

Schedule of Earnings and Crediting at December 31[1]:

Calendar Year	Tier One Earnings/(Loss) Available for Crediting	Credited Tier One	Credited Tier Two	Variable Earnings/ (Loss) Credited	Individual Account Program
2008	(27.18) %	8.00 %	(27.18) %	(43.71) %	(26.75) %
2009	19.12	8.00	19.12	37.57	18.47
2010	12.65	8.00	12.44	15.17	12.13
2011	2.21	8.00	2.21	(7.80)	2.15
2012	14.53	8.00	14.68	18.43	14.09
2013	15.76	8.00	15.62 [2]	25.74 [3]	15.59
2014	7.24	7.75	7.24	4.29	7.05
2015	1.87	7.75	1.87	(1.61)	1.85
2016	7.15	7.50	7.15	8.76	7.13
2017	15.23	7.50	15.23	26.48	14.72

[1]Calendar year-end information is provided because earnings are credited as of December 31.

[2]Earnings rate includes allocation from settlement of *Murray v. PERB* litigation.

[3]Earnings rate includes allocation from settlement of *White, et al. v. PERB* litigation.

Schedule of Benefit Expenses By Type - Defined Benefit Pension Plan For the Years Ended June 30:

Fiscal Year	Service Benefits	Disability Benefits: Duty	Disability Benefits: Non-Duty	Retirement Benefit Totals	Death Benefits	Refunds[1]: Normal	Refunds[1]: Death	Total
2009	$ 2,672,728,881	$ 14,270,486	$ 100,050,006	$ 2,787,049,373	$ 3,169,091	$ 36,548,963	$ N/A	$ 2,826,767,427
2010	2,795,098,921	15,188,097	101,866,823	2,912,153,841	3,414,960	25,692,404	N/A	2,941,261,205
2011	3,074,390,373	15,967,087	105,974,442	3,196,331,902	7,606,867	17,203,318	9,283,908	3,230,425,995
2012	3,166,918,154	16,449,589	108,423,907	3,291,791,650	3,918,168	27,966,120	6,054,330	3,329,730,268
2013	3,422,618,167	17,242,718	111,616,337	3,551,477,222	4,582,777	10,074,038	7,365,530	3,573,499,567
2014	3,701,010,685	17,739,646	113,317,283	3,832,067,614	5,802,797	13,614,833	11,945,261	3,863,430,505
2015	3,790,050,384	17,943,338	113,129,130	3,921,122,852	6,044,180	7,283,720	9,197,495	3,943,648,247
2016	4,045,951,252	18,896,881	118,534,433	4,183,382,566	9,925,146	6,342,385	6,812,193	4,206,462,290
2017	4,204,153,060	18,965,495	118,479,583	4,341,598,137	4,684,598	6,589,962	9,371,782	4,362,244,479
2018	4,497,691,956	19,356,946	120,819,135	4,637,868,037	4,849,807	5,145,792	8,730,502	4,656,594,138

[1]Prior to fiscal year 2011 information to present refunds by type was not available and was combined in Normal Refunds.

Schedule of Average OPEB Benefits for Retirement Health Insurance Account[1] For the Year Ended June 30, 2018:

Years Credited Service	8+
Average Monthly Benefit	$60.00
Final Average Salary	N/A
Number of Active Retirees	44,890

Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account[1] For the Year Ended June 30, 2018:

Years Credited Service	8 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	Total
Average Monthly Benefit	$ 193	$ 231	$ 270	$ 308	$ 347	$ 385	$ 357
Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of Active Retirees	6	25	74	106	232	623	1,066

[1] Effective years of retirement and final average salary are not available for OPEB.

Schedule of Average Defined Benefit Pension Payments

Retirement Effective Dates July 1, 2008 to June 30, 2018		Years Credited Service 0-5	6-10	11-15	16-20	21-25	26-30	31+	Total
2009	Average Monthly Benefit	$790	$1,012	$1,391	$1,971	$2,799	$4,328	$5,709	**$2,764**
	Final Average Salary	$3,233	$3,433	$3,850	$4,339	$4,805	$5,307	$5,862	**$4,556**
	Number of Active Retirees	216	561	633	783	707	1,041	424	**4,365**
2010	Average Monthly Benefit	$672	$1,068	$1,344	$1,940	$2,735	$4,234	$5,380	**$2,727**
	Final Average Salary	$3,185	$3,644	$3,931	$4,515	$5,132	$5,438	$5,858	**$4,736**
	Number of Active Retirees	240	627	672	916	874	1,144	548	**5,021**
2011	Average Monthly Benefit	$691	$1,029	$1,396	$1,895	$2,678	$4,080	$5,578	**$2,701**
	Final Average Salary	$3,270	$3,634	$4,072	$4,642	$5,252	$5,901	$6,275	**$4,939**
	Number of Active Retirees	286	768	914	1,080	1,124	1,240	778	**6,190**
2012	Average Monthly Benefit	$658	$1,021	$1,442	$1,868	$2,591	$3,883	$5,347	**$2,602**
	Final Average Salary	$3,566	$3,881	$4,381	$4,894	$5,688	$6,266	$6,976	**$5,294**
	Number of Active Retirees	322	861	1,010	1,055	1,238	1,204	875	**6,565**
2013	Average Monthly Benefit	$707	$1,068	$1,480	$1,948	$2,613	$3,850	$5,489	**$2,608**
	Final Average Salary	$3,642	$3,828	$4,439	$5,020	$5,921	$6,616	$6,950	**$5,389**
	Number of Active Retirees	378	953	1,101	1,112	1,342	1,163	940	**6,989**
2014	Average Monthly Benefit	$759	$1,072	$1,405	$1,791	$2,518	$3,620	$5,302	**$2,464**
	Final Average Salary	$3,574	$3,629	$4,366	$4,996	$5,899	$6,385	$6,955	**$5,291**
	Number of Active Retirees	396	1,037	1,130	1,236	1,442	1,240	928	**7,409**
2015	Average Monthly Benefit	$603	$827	$1,246	$1,742	$2,347	$3,466	$5,179	**$2,258**
	Final Average Salary	$3,901	$3,801	$4,494	$5,147	$5,771	$6,524	$7,347	**$5,382**
	Number of Active Retirees	301	842	1,023	1,113	1,155	1,102	643	**6,179**
2016	Average Monthly Benefit	$708	$866	$1,241	$1,759	$2,337	$3,425	$5,145	**$2,352**
	Final Average Salary	$3,593	$3,818	$4,516	$5,280	$5,878	$6,811	$7,347	**$5,543**
	Number of Active Retirees	331	860	1,006	1,134	1,247	1,303	800	**6,681**
2017	Average Monthly Benefit	$677	$975	$1,285	$1,753	$2,469	$3,417	$5,248	**$2,464**
	Final Average Salary	$3,689	$3,851	$4,537	$5,443	$6,192	$7,036	$8,085	**$5,815**
	Number of Active Retirees	379	916	1,098	1,198	1,178	1,379	1,030	**7,178**
2018	Average Monthly Benefit	$1,011	$1,050	$1,252	$1,699	$2,478	$3,326	$4,965	**$2,394**
	Final Average Salary	$3,921	$3,950	$4,394	$5,437	$6,387	$7,085	$8,014	**$5,837**
	Number of Active Retirees	367	955	1,055	1,330	1,207	1,483	948	**7,345**

Schedule of Benefit Recipients by Benefit Type
For the Year Ended June 30, 2018

Monthly Benefit Amount	Number of Retirees	Type of Retirement *					Refund Annuity	Annuity Options **				Lump-Sum Options **		
		1	2	3	4	5		1	2	3	4	1	2	3
$ 1-500	17,776	14,176	63	116	2,954	467	1,439	5,526	4,829	1,040	804	2,096	1,642	400
501-1000	20,912	17,112	105	542	2,452	701	2,132	7,043	6,555	1,923	1,068	1,040	904	247
1001-1500	17,681	14,615	79	635	1,795	557	1,715	5,598	6,029	1,837	803	754	730	215
1501-2000	15,010	12,596	71	576	1,339	428	1,466	4,336	5,429	1,668	659	597	683	172
2001-2500	12,980	11,103	72	494	997	314	1,219	3,696	4,666	1,489	532	545	698	135
2501-3000	10,961	9,562	66	369	710	254	1,031	3,049	4,038	1,262	397	453	613	118
3001-3500	9,345	8,339	47	239	580	140	825	2,556	3,609	1,227	346	297	389	96
3501-4000	8,086	7,376	41	169	427	73	748	2,173	3,325	1,060	300	169	252	59
4001-4500	7,167	6,656	35	127	310	39	559	1,893	3,112	1,062	273	110	114	44
4501-5000	6,311	5,953	22	67	235	34	456	1,623	2,849	960	239	59	94	31
5001-5500	5,208	4,899	11	52	225	21	392	1,285	2,443	834	156	23	58	17
5501-6000	3,981	3,775	13	25	157	11	279	1,041	1,819	639	139	18	39	7
6000+	10,445	9,914	22	49	436	24	571	2,194	5,077	2,146	309	42	84	22
Totals	**145,863**	**126,076**	**647**	**3,460**	**12,617**	**3,063**	**12,832**	**42,013**	**53,780**	**17,147**	**6,025**	**6,203**	**6,300**	**1,563**

* Type of Retirement

1 - Normal
2 - Duty Disability
3 - Non-Duty Disability
4 - Survivor Payment
5 - Alternate Payee

** Annuity and Lump-Sum Options

1 - No benefit for beneficiary
2 - Beneficiary receives same monthly benefit for life
3 - Beneficiary receives half the monthly benefit for life
4 - 15-year certain

Schedule of Retirement System Membership
at December 31:

Five Year Increments	1985	1990	1995	2000	2005	2010	2015
State Agencies	37,824	46,187	45,068	42,434	38,076	48,018	47,331
School Districts	47,590	48,144	55,734	63,133	56,756	79,798	66,184
Political Subdivisions	26,238	33,177	40,635	53,291	50,085	65,332	54,662
Inactive Members	15,920	23,225	32,033	44,830	47,289	40,481	42,849
Total Non-Retired	127,572	150,733	173,470	203,688	192,206	233,629	211,026
Retired Members and Beneficiaries	46,181	55,540	64,796	82,355	101,213	110,573	136,298
Total Membership	173,753	206,273	238,266	286,043	293,419	344,202	347,324
Administrative Expense[1]	$2,905,072	$8,901,091	$13,500,677	$24,358,550	$40,056,600	$38,029,071	$47,934,435
Pension Roll (one month)	$18,083,614	$33,175,888	$58,457,531	$122,467,087	$202,633,214	$265,490,496	$333,044,107

[1] Fiduciary Funds only.

Schedule of Retirement System Membership
at June 30:

	2012	2013	2014	2015	2016	2017	2018
State Agencies	45,953	45,019	45,774	47,620	47,868	48,099	48,320
School Districts	67,172	63,297	64,824	66,434	68,648	69,510	71,238
Political Subdivisions	56,656	54,943	54,376	54,536	55,160	55,696	56,439
Inactive Members	42,286	44,819	43,646	44,786	45,925	45,709	45,993
Total Non-Retired	212,067	208,078	208,620	213,376	217,601	219,014	221,990
Retired Members and Beneficiaries	119,346	123,827	129,138	132,506	136,435	136,435	145,863
Total Membership	331,413	331,905	337,758	345,882	354,036	355,449	367,853
Administrative Expense[1]	$42,254,365	$42,792,995	$40,395,370	$45,791,942	$51,763,886	$55,931,659	$53,644,733
Pension Roll (one month)	$284,236,712	$299,997,147	$303,834,899	$317,090,746	$337,405,252	$355,414,652	$376,397,537

[1] Fiduciary Funds only.

Schedule of Principal Participating Employers
Current Fiscal Year and Nine Years Ago

	2018			2009		
	Number of Current Employees	Rank	Percent of Total System	Number of Current Employees	Rank	Percent of Total System
State of Oregon	48,320	1	27.46 %	44,377	1	25.94 %
Portland Public Schools	5,788	2	3.29	5,589	3	3.27
Salem Keizer Public Schools	5,389	3	3.06	4,613	4	2.70
City of Portland	5,205	4	2.96	4,524	6	2.64
Multnomah County	4,986	5	2.83	4,298	7	2.51
Beaverton School District	4,755	6	2.70	4,597	5	2.69
Oregon Health and Science University	3,640	7	2.07	5,964	2	3.49
Hillsboro School District	2,434	8	1.38	2,520	8	1.47
Portland Community College	2,313	9	1.31	2,201	9	1.29
Eugene School District	2,035	10	1.16	2,171	10	1.27
All Others*	91,132		51.78	90,214		52.74
Total	175,997		100.00 %	171,068		100.00 %

* "All Others" consisted of:

	2018 Number of Current Employees	2018 Percent of Total System	2009 Number of Current Employees	2009 Percent of Total System
Counties	13,160	7.48 %	13,075	7.64 %
Municipalities	13,238	7.53	12,030	7.03
School Districts	50,837	28.90	51,456	30.08
Community Colleges	5,694	3.24	6,296	3.68
Other Political Subdivisions	8,203	4.66	7,357	4.30
Total All Others	91,132	51.78 %	90,214	52.74 %

Schedule of Participating Employers (904)

State (108)

Appraiser Certification and Licensure Board
Board of Accountancy
Board of Architect Examiners
Board of Chiropractic Examiners
Board of Examiners for Engineering and Land Surveying
Board of Geologists Examiners
Board of Optometry
Board of Parole and Post-Prison Supervision
Board of Pharmacy
Bureau of Labor and Industries
Commission on Indian Services
Commission on Judicial Fitness and Disability
Construction Contractors Board
Department of Administrative Services
Department of Agriculture
Department of Aviation
Department of Consumer and Business Services
Department of Corrections
Department of Education
Department of Energy
Department of Environmental Quality
Department of Human Services
Department of Justice
Department of Land Conservation and Development
Department of Military-Federal Employees
Department of Revenue
Department of State Lands
Department of State Police
Department of Transportation
Department of Veterans' Affairs
Department Of Education Coordinating Commission
District Attorneys Department
Eastern Oregon University
Employment Department
Employment Relations Board
Forestry Department
Geology and Mineral Industries
Health Related Licensing Boards
Judicial Department
Land Use Board of Appeals
Landscape Contractors Board
Legislative Administration Board (Committee)
Legislative Assembly
Legislative Committees
Legislative Fiscal Office
Legislative Policy & Research Committee
Long Term Care Ombudsman
Military Department
Office of Legislative Counsel
Office of the Governor
Office of the State Treasurer
Oregon Advocacy Commission Office
Oregon Beef Council
Oregon Board of Dentistry
Oregon Board of Licensed Professional Counselors and Therapists
Oregon Board of Massage Therapists
Oregon Board of Medical Examiners
Oregon Business Development Department
Oregon Commission for the Blind
Oregon Corrections Enterprises
Oregon Criminal Justice Commission
Oregon Dairy Products Commission
Oregon Department of Fish and Wildlife
Oregon Dungeness Crab Commission
Oregon Education Investment Board
Oregon Film and Video
Oregon Forest Resources Institute
Oregon Government Ethics Commission
Oregon Health Authority
Oregon Hop Commission
Oregon Housing and Community Services
Oregon Institute of Technology
Oregon Liquor Control Commission
Oregon Parks and Recreation Department
Oregon Patient Safety Commission
Oregon Potato Commission
Oregon Racing Commission
Oregon Salmon Commission
Oregon State Bar
Oregon State Bar Professional Liability Fund
Oregon State Board of Nursing
Oregon State Library
Oregon State University
Oregon Tourism Commission
Oregon Trawl Commission
Oregon Watershed Enhancement Board
Oregon Wheat Commission
Oregon Youth Authority
Physical Therapist Licensing Board
Portland State University
Psychiatric Security Review Board
Public Defense Services Commission
Public Employees Retirement System
Public Safety Standards and Training
Public Utility Commission
Real Estate Agency
Secretary of State
Southern Oregon University
State Accident Insurance Fund
State Board of Clinical Social Workers
State Board of Tax Practitioners
State Lottery Commission
State Marine Board
Teacher Standards and Practices Commission
Travel Information Council
University of Oregon
Water Resources Department
Western Oregon University

Political Subdivisions (483)

Adair Village, City of
Albany, City of
Amity Fire District
Amity, City of
Applegate Valley RFPD 9
Arch Cape Service District
Ashland Parks Commission
Ashland, City of
Astoria, City of
Athena, City of
Aumsville RFPD
Aumsville, City of
Aurora RFPD
Aurora, City of
Baker County
Baker County Library District
Baker Valley Irrigation District
Baker, City of
Bandon, City of
Banks Fire District 13
Banks, City of
Bay City, City of
Beaverton, City of
Bend Metropolitan Park and Recreation District
Bend, City of
Benton County
Black Butte Ranch RFPD
Black Butte Ranch Service District
Boardman RFPD
Boardman, City of
Brookings, City of
Brownsville RFPD
Burns, City of
Burnt River Irrigation District
Butte Falls, Town of
Canby FPD 62
Canby Utility Board
Canby, City of
Cannon Beach RFPD
Cannon Beach, City of
Canyon City, Town of
Canyonville, City of
Carlton, City of
Cascade Locks, City of
Cave Junction, City of
Central Oregon Coast Fire and Rescue
Central Oregon Intergovernmental Council
Central Oregon Irrigation District
Central Oregon Regional Housing Authority
Central Point, City of
Charleston RFPD
Chetco Community Public Library Board
Chiloquin, City of
Chiloquin-Agency Lake RFPD

City County Insurance Services
City of Forest Grove
Clackamas County
Clackamas County Fair
Clackamas County Fire District 1
Clackamas County Vector Control District
Clackamas River Water
Clackamas River Water Providers
Clatskanie Library District
Clatskanie People's Utility District
Clatskanie RFPD
Clatskanie, City of
Clatsop County
Clean Water Services
Cloverdale RFPD
Coburg RFPD
Coburg, City of
Colton RFPD 70
Columbia City, City of
Columbia County
Columbia County 911 Communications District
Columbia Drainage Vector Control District
Columbia River Fire and Rescue
Columbia River PUD
Community Services Consortium
Condon, City of
Coos Bay, City of
Coos County
Coos County Airport District
Coquille, City of
Corbett Water District
Cornelius, City of
Corvallis, City of
Cottage Grove, City of
Crescent RFPD
Creswell, City of
Crook County
Crook County RFPD 1
Crooked River Ranch RFPD
Crystal Springs Water District
Culver, City of
Curry County
Curry Public Library District
Dallas, City of
Dayton, City of
Depoe Bay RFPD
Depoe Bay, City of
Deschutes County
Deschutes County RFPD 2
Deschutes Public Library District
Deschutes Valley Water District
Dexter RFPD
Douglas County
Douglas County RFPD 2
Douglas County Soil and Water Conservation District
Drain, City of
Dufur, City of
Dundee, City of
Dunes City, City of
Durham, City of
Eagle Point, City of
East Fork Irrigation District
East Umatilla County RFPD
Echo, City of
Elgin, City of
Elkton, City of
Enterprise, City of
Estacada Cemetery Maintenance District
Estacada RFD 69
Estacada, City of
Eugene Water and Electric Board
Eugene, City of
Fairview Water District
Fairview, City of
Falls City, City of
Farmers Irrigation District
Fern Ridge Community Library
Florence, City of
Fossil, City of
Garibaldi, City of
Gaston RFPD
Gaston, City of
Gearhart, City of
Gervais, City of
Gilliam County
Gladstone, City of
Glide RFPD
Gold Beach, City of
Gold Hill, City of
Goshen RFPD
Grant County
Grants Pass Irrigation District
Grants Pass, City of
Greater St. Helens Parks and Recreation District
Green Sanitary District
Gresham, City of
Halsey, City of
Halsey-Shedd RFPD
Happy Valley, City of
Harbor Water PUD
Harney County
Harney Health District
Harrisburg Fire and Rescue
Harrisburg, City of
Helix, City of
Heppner, City of
Hermiston, City of
High Desert Park and Recreation District
Hillsboro, City of
Hines, City of
Hood River County
Hood River, City of
Hoodland RFD 74
Horsefly Irrigation District
Housing Authority of Clackamas County
Housing Authority of Jackson County
Housing Authority of Portland
Hubbard RFPD
Hubbard, City of
Huntington, City of
Ice Fountain Water District
Idanha-Detroit Rural Fire Protection District
Illinois Valley RFPD
Imbler RFPD
Imbler, City of
Independence, City of
Irrigon, City of
Jackson County
Jackson County Fire District 3
Jackson County Fire District 4
Jackson County Fire District 5
Jackson County Fire District 6
Jackson County Vector Control District
Jacksonville, City of
Jefferson County
Jefferson County EMS District
Jefferson County Library District
Jefferson County RFPD 1
Jefferson County SWCD
Jefferson RFPD
Jefferson, City of
John Day, City of
Jordan Valley, City of
Joseph, City of
Josephine County
Judges PERS
Junction City RFPD
Junction City, City of
Juntura Road District 4
Keizer RFPD
Keizer, City of
King City, City of
Klamath County
Klamath County Emergency Communications District
Klamath County Fire District 1
Klamath Falls, City of
Klamath Housing Authority
Klamath Vector Control District
Knappa Svensen Burnside RFPD
Lyons Fire District
La Grande Rural Fire Protection District
La Grande, City of
La Pine RFPD
Lafayette, City of
Lake Chinook Fire And Rescue District
Lake County
Lake County Library District
Lake Oswego, City of
Lakeside Water District
Lakeside, City of
Lakeview, Town of
Lane Council of Governments
Lane County
Lane Fire Authority
League of Oregon Cities
Lebanon Aquatic District
Lebanon RFPD
Lebanon, City of
Lincoln City, City of

Lincoln County
Linn County
Linn-Benton Housing Authority
Local Government Personnel Institute
Lowell, City of
Lowell RFPD
Lyons, City of
Madras, City of
Malheur County
Malin, City of
Manzanita, City of
Mapleton Water District
Marion County
Marion County Fire District 1
Marion County Housing Authority
Maupin, City of
McKenzie RFPD
McMinnville Water and Light Department
McMinnville, City of
Medford Irrigation District
Medford Water Commission
Medford, City of
Merrill, City of
Metolius, City of
METRO
Metropolitan Area Communication Commission
Mid-Columbia Center for Living
Mid-Columbia Fire And Rescue
Mid-Valley Behavioral Care Network
Mill City RFPD
Mill City, City of
Millersburg, City of
Millington RFPD
Milton-Freewater, City of
Milwaukie, City of
Mist-Birkenfeld RFPD
Mohawk Valley RFD
Molalla RFPD 73
Molalla, City of
Monmouth, City of
Monroe RFPD
Monroe, City of
Moro, City of
Mosier Fire District
Mt. Angel Fire District
Mt. Angel, City of
Mt. Vernon, City of
Mulino Water District 23
Multnomah County
Multnomah County Drainage District 1
Multnomah County RFPD 14
Myrtle Creek, City of
Myrtle Point, City of
Nehalem Bay Fire and Rescue
Nehalem Bay Health District
Nehalem Bay Wastewater Agency
Nesika Beach - Ophir Water District
Neskowin Regional Sanitary Authority
Neskowin Regional Water District
Nestucca RFPD
Netarts Water District
Netarts-Oceanside RFPD
Netarts-Oceanside Sanitary District
Newberg, City of
Newport, City of
North Bend City Housing Authority
North Bend, City of
North Central Public Health District
North Clackamas County Water Commission
North Douglas County Fire and EMS
North Lincoln Fire & Rescue District 1
North Marion County Communications
North Morrow Vector Control District
North Plains, City of
North Powder, City of
North Wasco County Parks & Recreation District
Northeast Oregon Housing Authority
Northern Oregon Corrections
Northwest Senior and Disability Services
Nyssa Road Assessment District 2
Nyssa, City of
Oak Lodge Water Service District
Oakland, City of
Oakridge, City of
Ochoco Irrigation District
Odell Sanitary District
Ontario, City of
Oregon Cascades West COG
Oregon City, City of
Oregon Community College Association
Oregon Health & Science University
Oregon Municipal Electric Utilities Association
Oregon School Boards Association
Oregon Trail Library District
Owyhee Irrigation District
Parkdale RFPD
Pendleton, City of
Philomath Fire and Rescue
Philomath, City of
Phoenix, City of
Pilot Rock, City of
Pleasant Hill RFPD
Polk County
Polk County Fire District 1
Polk Soil and Water Conservation District
Port of Astoria
Port of Cascade Locks
Port of Coos Bay, International
Port of Garibaldi
Port of Hood River
Port of Newport
Port of Portland
Port of St. Helens
Port of The Dalles
Port of Tillamook Bay
Port of Umatilla
Port Orford Public Library
Port Orford, City of
Portland Development Commission
Portland, City of
Powers, City of
Prairie City, City of
Prineville, City of
Rainbow Water District
Rainier Cemetery District
Rainier, City of
Redmond Area Park and Recreation District
Redmond Fire and Rescue
Redmond, City of
Reedsport, City of
Riddle, City of
Rockaway Beach, City of
Rockwood Water PUD
Rogue River RFPD
Rogue River Valley Irrigation District
Rogue River, City of
Roseburg Urban Sanitary Authority
Roseburg, City of
Rural Road Assessment District 3
Salem Housing Authority
Salem, City of
Salmon Harbor and Douglas County
Sandy RFPD 72
Sandy, City of
Santa Clara RFPD
Scappoose Public Library District
Scappoose RFPD
Scappoose, City of
Scio RFPD
Seal Rock RFPD
Seal Rock Water District
Shady Cove, City of
Sheridan Fire District
Sheridan, City of
Sherman County
Sherwood, City of
Siletz Rural Fire Protection District
Silver Falls Library District
Silverton RFPD 2
Silverton, City of
Sisters and Camp Sherman RFPD
Sisters, City of
Siuslaw Public Library District
Siuslaw RFPD 1
South Fork Water Board
South Lane County Fire and Rescue
South Suburban Sanitary District
Southwest Lincoln County Water District
Springfield, City of
St. Helens, City of
Stanfield, City of
Stayton RFPD
Stayton, City of
Sublimity RFPD
Suburban East Salem Water District
Sunrise Water Authority
Sunriver Service District
Sutherlin Water Control District
Sutherlin, City of
Sweet Home Cemetery Maintenance District

Sweet Home Fire and Ambulance District
Sweet Home, City of
Talent Irrigation District
Talent, City of
Tangent RFPD
Tigard, City of
Tillamook County Emergency Communications District
Tillamook County Soil and Water Conservation District
Tillamook Fire District
Tillamook People's Utility District
Tillamook, City of
Toledo, City of
Tri-City Water and Sanitary Authority
Tri-County Cooperative Weed Management Area
Troutdale, City of
Tualatin Valley Fire and Rescue
Tualatin Valley Irrigation District
Tualatin Valley Water District
Tualatin, City of
Turner, City of
Umatilla County
Umatilla County Fire District #1
Umatilla County Soil and Water District
Umatilla County Special Library District
Umatilla RFPD 7-405
Umatilla, City of
Umatilla-Morrow Radio and Data District
Vale, City of
Valley View Cemetery Maintenance District
Veneta, City of
Vernonia RFPD
Vernonia, City of
Waldport, City of
Wallowa County
Wallowa, City of
Warrenton, City of
Wasco County
Wasco County Soil and Water Conservation District
Washington County
Washington County Consolidated Communications Agency
West Extension Irrigation District
West Linn, City of
West Multnomah Soil and Water Conservation District
West Side Fire District
West Slope Water District
West Valley Fire District
West Valley Housing Authority
Western Lane Ambulance District
Westfir, City of
Weston Cemetery District
Weston, City of
Wheeler, City of
Wickiup Water District
Willamina, City of
Wilsonville, City of
Winchester Bay Sanitary District
Winston, City of
Winston-Dillard Fire District
Winston-Dillard Water District
Wood Village, City of
Woodburn Fire District
Woodburn, City of
Wy'East Fire District
Yachats RFPD
Yachats, City of
Yamhill Communications Agency
Yamhill County
Yamhill Fire Protection District
Yamhill, City of
Yoncolla, City of

Community Colleges (17)

Blue Mountain Community College
Central Oregon Community College
Chemeketa Community College
Clackamas Community College
Clatsop Community College
Columbia Gorge Community College
Klamath Community College
Lane Community College
Linn-Benton Community College
Mt. Hood Community College
Oregon Coast Community College
Portland Community College
Rogue Community College
Southwestern Oregon Community College
Tillamook Bay Community College
Treasure Valley Community College
Umpqua Community College

School Districts (296)

Alliance Charter Academy
Arco Iris Spanish Immersion Charter School
Armadillo Technical Institute
Baker CSD 16J
Baker CSD 30 J
Baker CSD 5J
Baker CSD 61
Baker Web Academy
Ballston Community School
Beaverton School District 48J
Bend International School
Bennett Pearson Academy Charter School
Benton CSD 17J
Benton CSD 1J
Benton CSD 509J
Benton CSD 7J
Bridge Charter Academy
Cannon Beach Academy
Cascade Heights Public Charter School
Center For Advanced Learning
Central Curry School District 1
City View Charter School
Clackamas Charter Alliance 1
Clackamas County ESD
Clackamas CSD 108
Clackamas CSD 115
Clackamas CSD 12
Clackamas CSD 3
Clackamas CSD 35
Clackamas CSD 46
Clackamas CSD 53
Clackamas CSD 62
Clackamas CSD 7J
Clackamas CSD 86
Clatskanie School District 6J
Clatsop CSD 10
Clatsop CSD 1C
Clatsop CSD 30
Clatsop CSD 4
Clatsop CSD 8
Coburg Community Charter School
Columbia CSD 13
Columbia CSD 47 J
Columbia CSD 502
Condon Admin. School District 25J
Coos CSD 13
Coos CSD 31
Coos CSD 41
Coos CSD 54
Coos CSD 8
Coos CSD 9
Crater Lake Charter Academy
Crook CSD
Curry CSD 17C
Curry CSD 2CJ
Dallas Community School
Dayton School District 8
Desert Sky Montessori
Deschutes CSD 1
Deschutes CSD 2J
Deschutes CSD 6
Douglas County ESD
Douglas CSD 1
Douglas CSD 105
Douglas CSD 116
Douglas CSD 12
Douglas CSD 130
Douglas CSD 15
Douglas CSD 19
Douglas CSD 21
Douglas CSD 22
Douglas CSD 32
Douglas CSD 34
Douglas CSD 4
Douglas CSD 70
Douglas CSD 77
EagleRidge High School
Eddyville Charter School
Estacada Web and Early College Academy 1
Forest Grove Community School
Fossil School District 21J
Four Rivers Community School
Frontier Charter Academy
Gilliam CSD 3
Grant County ESD
Grant CSD 16J

Grant CSD 17
Grant CSD 4
Grant CSD 8
Grant School District 3
Greater Albany Public Schools 8J
Gresham Barlow Web Academy Public Charter School
Harney CSD 10
Harney CSD 13
Harney CSD 16
Harney CSD 28
Harney CSD 3
Harney CSD 4
Harney CSD 5
Harney CSD 7
Harney CSD UH1J
Harney ESD Region 17
Harrisburg School District 7
High Desert Education Service District
Hillsboro School District 1J
Hood River CSD
Hope Chinese Charter School
Howard Street Charter School, Inc.
Inavale Community Partners
Insight School Of Oregon Charter
Ione School District
Jackson CSD 35
Jackson CSD 4
Jackson CSD 5
Jackson CSD 549C
Jackson CSD 59
Jackson CSD 6
Jackson CSD 9
Jackson CSD 91
Jackson CSD 94
Jefferson County ESD
Jefferson CSD 4
Jefferson CSD 41
Jefferson CSD 509J
Jefferson CSD 8
Jordan Valley School District 3
Josephine County UJ School District
Josephine CSD 7
Kairos PDX
Kings Valley Charter School
Klamath CSD CU
Klamath Falls City Schools
Knova Learning Oregon
Lake County ESD
Lake CSD 11C
Lake CSD 14
Lake CSD 18
Lake CSD 21
Lake CSD 7
Lane County ESD
Lane CSD 1
Lane CSD 19
Lane CSD 28J
Lane CSD 32
Lane CSD 40
Columbia Gorge Education Service District
Clackamas Charter Alliance 2
Lane CSD 45J3
Lane CSD 4J
Lane CSD 52
Lane CSD 66
Lane CSD 68
Lane CSD 69
Lane CSD 71
Lane CSD 76
Lane CSD 79J
Lane CSD 90
Lane CSD 97J
Le Monde Immersion Charter School
Lewis and Clark Montessori Charter School
Lincoln CSD
Linn Benton Lincoln ESD
Linn CSD 129J
Linn CSD 55
Linn CSD 552C
Linn CSD 9
Linn CSD 95C
Logos Public Charter School
Lourdes Charter School
Luckiamute Valley Charter School
Madrone Trail Public Charter School
Malheur CSD 12
Malheur CSD 26C
Malheur CSD 29
Malheur CSD 61
Malheur CSD 66
Malheur CSD 81
Malheur CSD 84
Malheur CSD 8C
Malheur ESD Region 14
Marion CSD 1
Marion CSD 103C
Marion CSD 14CJ
Marion CSD 15
Marion CSD 24J
Marion CSD 45
Marion CSD 4J
Marion CSD 5
Marion CSD 91
Mastery Learning Institute
Molalla River Academy
Morrow CSD
Mosier Community School
Mountain View Academy
Multisensory Institute Teaching Children
Multisensory Learning Academy
Multnomah County ESD
Multnomah CSD 1
Multnomah CSD 10
Multnomah CSD 28-302 JT
Multnomah CSD 3
Multnomah CSD 39
Multnomah CSD 51JT
Multnomah CSD 7
Multnomah CSD R-40
Nixyaawii Community School
North Central ESD
North Powder School District
North Santiam School District 29J
North Wasco CSD 21
Northwest Regional ESD
Opal School
Oregon Connections Academy
Oregon Virtual Academy
Oregon Virtual Education East
Oregon Virtual Education West
Personalized Learning, Inc.
Phoenix School, The
Polk CSD 13J
Polk CSD 2
Polk CSD 21
Polk CSD 57
Portland Village School
Powell Butte Community Charter School
Renaissance Public Academy
Ridgeline Montessori Public Charter School
River's Edge Academy Charter School
Sage Community School
Sand Ridge Charter School
Sauvie Island Academy
Scappoose School District 1J
Sheridan AllPrep Academy
Sheridan Japanese School Foundation
Sherman CSD
Sherwood Charter School
Siletz Valley Early College Academy
Siletz Valley School
Sisters Web and Early College Academy #3
South Coast ESD Region 7
South Columbia Family School
South Harney School District 33
South Wasco County School District 1
Southern Oregon ESD
Southwest Charter School
Springfield Academy Of Arts & Academics
Springwater Environmental Sciences School
Sunny Wolf Charter School
Sweet Home Charter School
The Emerson School
The Ivy School
The Lighthouse School
The Valley School of Southern Oregon
The Village School
Three Rivers Charter School
Tillamook CSD 101
Tillamook CSD 56
Tillamook CSD 9
Trillium Charter School
Umatilla County Administrative School District 1R
Umatilla CSD 16R
Umatilla CSD 29RJ
Umatilla CSD 2R
Umatilla CSD 5
Umatilla CSD 61R
Umatilla CSD 6R
Umatilla CSD 7
Umatilla CSD 80R

Umatilla CSD 8R
Umatilla Morrow ESD
Union CSD 1
Union CSD 11
Union CSD 15
Union CSD 23
Union CSD 5
Wallowa County Region 18 ESD
Wallowa CSD 12
Wallowa CSD 21
Wallowa CSD 54
Wallowa CSD 6
Wasco CSD 29
Washington CSD 13
Washington CSD 15
Washington CSD 23J
Washington CSD 511JT
Washington CSD 88J
West Lane Technical Learning Center
Wheeler CSD 1
Wheeler CSD 55U
Willamette ESD
Woodland Charter School
Yamhill CSD 1
Yamhill CSD 29JT
Yamhill CSD 30-44-63J
Yamhill CSD 40
Yamhill CSD 48J
Yamhill CSD 4J

OREGON

PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM