

Comprehensive Annual Financial Report



Oregon Public Employees Retirement System
An Agency of the State of Oregon
For the Fiscal Year Ended June 30, 2016

***Oregon Public Employees
Retirement System***
An Agency of the State of Oregon

***Comprehensive Annual
Financial Report***
For the Fiscal Year Ended June 30, 2016

Steven Patrick Rodeman
Executive Director

Kyle J. Knoll
Chief Financial Officer

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Introductory Section



Oregon

Kate Brown, Governor

Public Employees Retirement System

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December 1, 2016

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 or the System) for the fiscal year ended June 30, 2016. 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 to members; administer retiree health insurance programs; and oversee the state-sponsored deferred compensation program. As of June 30, 2016, PERS provided services to 906 employers and to over 354,000 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 independent auditor's report is included in this report.

Management's Discussion and Analysis

Management's Discussion and Analysis (MD&A) provides a narrative introduction, overview, and analysis to accompany the basic financial statements. This letter of transmittal is designed to complement MD&A and should be read in conjunction with it. We would like to direct your attention to MD&A that begins on page 15.

Economic Condition and Major Initiatives

The economic condition of PERS is affected primarily by investment earnings. A comparative analysis of investment rates of return is presented on page 25 of this report.

Major Initiatives

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 the daily work.

In 2015, the management system was reevaluated and confirmed as the foundation for PERS' 2015-2020 Strategic Plan. Four strategic priorities were identified, with several areas of focus and specific, achievable goals and objectives related to the focus areas:

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

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

Supporting our goals are six core operating processes and six core supporting processes. Each process has an owner, sub processes, and outcome measures to monitor and document our progress. Quarterly target review meetings are held to review our progress and identify areas for improvement.

System Modernization Goals

PERS is working to maintain and evolve its information technology systems to meet business demands and provide expected levels of service to members and employers. This will allow the agency to increase and improve member-focused communications, improve member data security and reliability, and provide access to member transactions online.

Disaster Recovery Infrastructure

The agency is working to update its Disaster Recovery Plan. Activities include identifying high-risk areas needing immediate attention and establishing a discrete Business Continuity Program.

In-house Individual Account Program (IAP) Administration

PERS continues to work on transitioning IAP administration from a third-party administer to an in-house function to enhance service delivery to members and reduce program administration costs.

Oregon Supreme Court Decision: Moro

In 2015, the Oregon Supreme Court overturned some provisions of 2013 legislation that lowered the annual cost-of-living adjustment (COLA) for benefit recipients. PERS has restored the COLA for approximately 132,000 benefit recipients.

Customer Satisfaction Survey

Our member and employer customer satisfaction surveys conducted in fiscal year 2016 show overall improvement from 2015, continuing the positive trend of year-to-year improvement over the 11-year survey period. Over 92 percent of the member survey respondents and 88 percent of the employer survey respondents rated our overall customer service as “good” or “excellent.”

Changes in Accounting Standards

GASB Statement No. 72, *Fair Value Measurement and Application* provides guidance for determining a fair value measurement for financial reporting purposes, as well as guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This Statement is effective for the fiscal year ending June 30, 2016.

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.

Oregon Public Employees Retirement System

At its September 25, 2015 meeting, the Board directed its actuary to reduce the assumed rate of return on investments from 7.75 percent to 7.50 percent for the 2014 System valuation. The new assumed rate will become effective for Tier One earnings crediting in calendar year 2016 and will be used as the basis for updated actuarial equivalency factors effective January 1, 2016.

Financial Information

The financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America.

Internal Controls

Management is responsible for establishing and maintaining a system of internal controls to protect PERS' assets from loss, theft, or misuse and to ensure that adequate accounting data is compiled for the preparation of financial statements in conformity with generally accepted accounting principles. There are inherent limitations in the effectiveness of any system of internal controls, including the possibility of human error and the circumvention or overriding of controls. Accordingly, even an effective internal control system may not prevent or detect misstatements and can only provide reasonable assurance with respect to financial statement preparation.

Funding

Member contributions are set by statute at 6.0 percent, 7.0 percent for judges, of covered salary. Employer contributions are established by actuarial valuations conducted biennially in odd-numbered calendar years. PERS' 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 should increase the funding base and allow for a more stable employer contribution rate. As of the December 31, 2015 actuarial valuation, PERS has a funded ratio of 78.7 percent for the defined benefit pension plan it administers, including employer side accounts, and 71.3 percent excluding employer side accounts.

Investments

The Oregon Investment Council (OIC) has statutory authority (ORS 293.701) to establish policies for the investment and reinvestment of PERS funds. The OIC's primary investment objective is to make PERS' investment funds as productive as possible. At the same time, the OIC acts as a prudent investor in managing the PERS portfolio.

An integral part of investment policy is the strategic asset allocation policy. The target investment portfolio mix at fair value as of June 30, 2015, is 37.5 percent public equity, 17.50 percent private equity, 20 percent debt securities, 12.5 percent real estate and 12.5 percent alternatives. In addition to approved asset classes, target asset allocation ranges, and rebalancing policies, other safeguards on investments include the use of an independent custodian, defined limits of delegated authority, and independent audits. The System's long-term investment outlook allows the portfolio to take advantage of the favorable risk-return characteristics of equities by placing more emphasis on this category. The OIC primarily uses external portfolio managers, employing both passive (indexed) and active strategies. The portfolio is broadly diversified among equities, debt securities, real estate, and private equities, with additional diversification achieved through domestic and international investing. PERS securities are held by a custodian, State Street Bank and Trust Company.

PERS' Regular Investment Portfolio (Portfolio) experienced weak gains in fiscal year 2016 with a rate of return of 1.2 percent. This compares with a rate of return of 4.3 percent for fiscal year 2015. The Portfolio's trailing 10-year return was 6.7 percent, 0.8 percent lower than the System's current assumed rate of 7.50 percent. Descriptions of specific OIC policies regarding diversification, performance objectives, fees, and asset allocation are found on page 83.

Awards and Acknowledgements

Certificate of Achievement

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PERS for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2015. 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 only. PERS has received a Certificate of Achievement for the last 25 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 2016 Public Pension Standards Award to PERS for its plan design and administration.

The PPCC is a coalition of three associations representing public pension funds that cover the vast majority of public employees in the United States. The associations are: 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 fourteenth year the PPCC has offered the award to public retirement systems and the thirteenth consecutive year PERS has applied for and received the award.

Acknowledgments

PERS strives to provide complete and reliable information as a basis for making management decisions, to demonstrate responsible stewardship of assets contributed by members and their employers, and to comply with legal provisions. The compilation of this report reflects the combined efforts of the PERS staff.

This report is available on the PERS website at <http://oregon.gov/pers>, 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.

The cooperation of PERS employers contributes significantly to PERS' success and is greatly appreciated. We would also like to express our gratitude to the PERS Board and staff, the OIC, the Office of the State Treasurer staff, our advisors and consultants, and the many other people who work diligently to ensure the successful operation of PERS.

Respectfully submitted,



Steven Patrick Rodeman
Executive Director



Kyle J. Knoll
Chief Financial Officer

Oregon Public Employees Retirement System

Public Employees Retirement Board

The Oregon Legislature has delegated authority to the PERS Board of Trustees to administer the 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 governor and confirmed by the state Senate. The governor designates the chairperson. Statute specifies Board membership must be 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 June 30, 2016, the three Board members representing business management, pension management, or investing are Krystal Gema, John Thomas (board chair), and Stephan Buckley. Pat West (vice-chair) was appointed to represent public employees and retirees; Lawrence Furnstahl was appointed to represent public employers. Terms for each member begin and expire with staggered dates.

John Thomas (chair)

John Thomas is the president and CEO of Financial Pathways Group, a fee-based retirement planning firm in Eugene, Oregon. Mr. Thomas co-founded Pacific Benefit Consultants Inc. in 1993 and served in the past capacity as president and manager of the Financial Services Division. John is vice-chair of Advantage Dental and is a past divisional vice-president and chair of the Finance Committee of MDRT, an international association of insurance and financial service professionals located in Chicago. Mr. Thomas previously served as chair of the McKenzie-Willamette Hospital Board of Trustees and was chair of the Lane County Planning Commission and the Lane County Boundary Commission. John is also the past president of the Springfield Area Chamber of Commerce. Mr. Thomas holds a B.A. from Willamette University and an M.S. in financial services from The American College in Bryn Mawr, Pennsylvania. Mr. Thomas holds professional designations of chartered life underwriter, chartered financial consultant, and certified financial planner.

Pat West (vice-chair)

Pat West began his career as a Salem firefighter in 1975 and retired as a captain in 2001. Pat was also the legislative director of the Oregon State Firefighters Association from 1987 to 1998 and president from 1998 to 2008. He served on the Oregon Workers' Compensation Management Labor Advisory Committee, the Governor's Fire Policy Committee, PERS' Legislative Advisory Committee, and the Board of Oregon PERS Retirees, Inc. Pat is a graduate of South Salem High School and Chemeketa Community College. He attended Oregon State University and was in the U.S. Army from 1968 to 1970.

Krystal Gema

During her six years with Portland General Electric's Credit Risk Management, Krystal Gema has actively managed credit exposures and safeguarded the firm's assets from the risk of credit loss in connection with energy trading. She draws on her analytical skills to monitor and analyze energy trading entities' financial conditions for potential financial impacts. Her expertise includes stress testing the firm's trading portfolio, negotiating energy trading contracts and preparing SEC accounting disclosures. Prior to joining PGE, she worked with clients, investment managers, and consultants in Institutional Trust and Custody for US Bank. Gema holds a degree in business finance from Portland State University. She served as a board member for Step It Up, Inc. and is on the board of trustees for Legacy Health-Emanuel Medical Center Foundation. She is a member of the City Club of Portland, Portland Business Alliance, and Urban League of Portland.

Lawrence Furnstahl

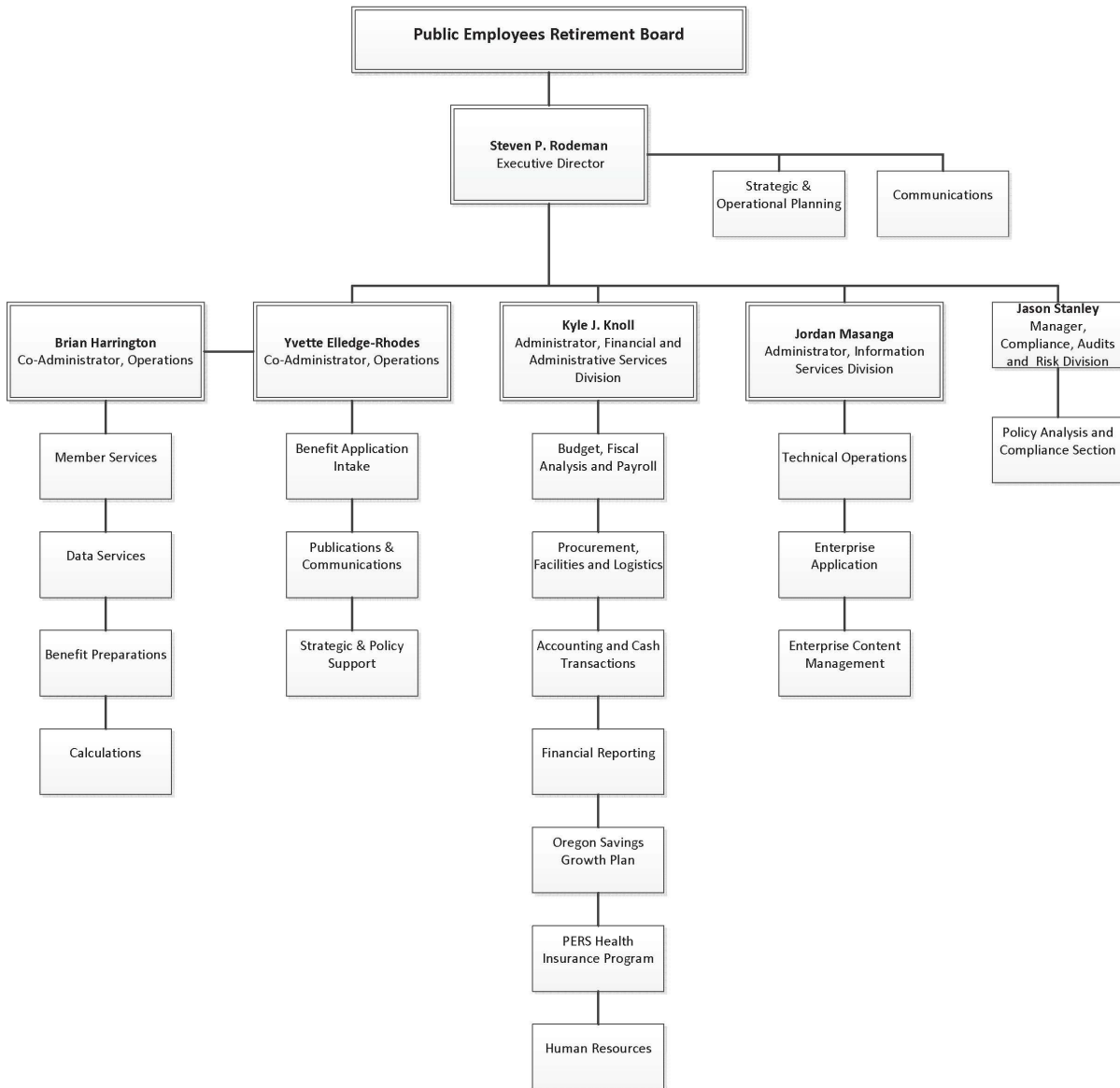
Lawrence J. Furnstahl has three decades experience in the strategic, financial, and operational management of complex organizations—universities and academic health centers—including over 25 years as a CFO. Furnstahl is Executive Vice President and Chief Financial Officer of Oregon Health & Science University, a \$2.3 billion Oregon public corporation with 2,500 faculty, 15,000 staff, 4,000 students and trainees, \$350 million of research, and the state's only major academic health center. Before joining OHSU in January 2011, Furnstahl served as chief financial and strategy officer for the University of Chicago Medical Center and Biological Sciences Division, and University vice president for financial planning for science; 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 and senior executive, patient services for the University of Chicago Hospitals. 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.

Stephen Buckley

Stephen Buckley is a partner in the Portland, Oregon, law firm Brownstein Rask, LLP. For more than 25 years, 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. Buckley is a speaker at employee benefit conferences sponsored by the International Foundation of Employee Benefit Plans. Buckley is a graduate of Colorado State University and received his Juris Doctorate degree from Willamette University College of Law.

Public Employees Retirement System Organizational Chart

As of 6/30/2016



Oregon Public Employees Retirement System Consultants

Actuary
Milliman, Inc.

Legal Counsel
Oregon Department of Justice

Insurance Consultant
Butler Partners & Associates LLC

Medical Advisor
F. William Miller, MD

Technology
HP Enterprise Services

Auditor
Macias Gini & O'Connell LLP

Strategic and Organizational Planning
Mass Ingenuity

Investments
Investment managers are reported in the Summary of Investment Fees, Commissions, and Expenses on page 78.



Government Finance Officers Association

**Certificate of
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Presented to

**Oregon Public Employees
Retirement System**

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2015



Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2016***

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)

A handwritten signature in black ink, reading 'Alan H. Winkle'. The signature is fluid and cursive, with the first name 'Alan' being more prominent than the last name 'Winkle'.

Alan H. Winkle
Program Administrator

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Financial Section



Certified
Public
Accountants

Century City
Los Angeles
Newport Beach
Oakland
Sacramento
San Diego
San Francisco
Walnut Creek
Woodland Hills

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 year ended June 30, 2016, and the related notes to the financial statements, which collectively comprise the System's 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.

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, 2016, 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 1 to the financial statements, the System implemented the provisions of Governmental Accounting Standards Board Statement (GASBS) No. 72, *Fair Value Measurement and Application*, for the fiscal year ended June 30, 2016.

As discussed in Note 10 to the financial statements, the total pension liability for the Defined Benefit Pension Plan, based on the actuarial valuation as of December 31, 2014, rolled forward to June 30, 2016, exceeded the plan's fiduciary net position by \$15.0 billion. The actuarial valuation is very sensitive to the underlying assumptions, including a discount rate of 7.50 percent, which represents the long-term expected rate of return.

Also discussed in Note 11 to the financial statements, based on the most recent actuarial valuations for the post-employment healthcare benefit plans as of December 31, 2015, the System's third-party actuary determined that the value of the post-employment healthcare plans' actuarial accrued liabilities exceeded the actuarial value of their assets by \$46.3 million for the Retirement Health Insurance Account plan, and \$56.6 million for the Retiree Health Insurance Premium Account plan.

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, 2015, from which such partial information was derived.

We have previously audited the System's 2015 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, 2015. In our opinion, the partial comparative information presented herein as of and for the fiscal year ended June 30, 2015, 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, the schedule of defined benefit pension plan employer contributions, the schedules of funding progress – OPEB plans, the schedules of employer contributions – OPEB plans, and the schedule of claims development information – Standard Retiree Health Insurance Account, 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 financial statements. The other supplemental information, 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 financial statements.

The other supplemental information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other supplemental information is fairly stated, in all material respects, in relation to the 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 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 December 1, 2016 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 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 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.



Sacramento, California
December 1, 2016

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 year ended June 30, 2016. 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 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, 2016. 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 liability compared to the fiduciary net position of the defined benefit pension plan, and the funded status of the other postemployment benefit plans. The information available in each of these sections is briefly summarized below:

Fund Financial Statements

At June 30, 2016, 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 (OPSRP IAP), the Retirement Health Insurance Account (RHIA), the Retiree Health Insurance Premium Account (RHIPA), and the Deferred Compensation 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, 2016, along with comparative total information as of and for the year ended June 30, 2015. 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, 2016, along with comparative total information as of and for the year ended June 30, 2015. These financial statements reflect the net position, changes in net position, and cash flows resulting from PERS business-type activities.

Oregon Public Employees Retirement System

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 about PERS’ long-term debt.
- Note 7 – provides information on reserves.
- Note 8 – provides information on potential contingencies of PERS.
- Note 9 – provides information on the estimated claims liability of the SRHIA.
- Note 10 – provides information on the Employers’ Net Pension Liability.
- Note 11 – provides information about the funded status of other postemployment benefit plans administered by PERS.

Required Supplementary Information

In addition to the financial statements and notes explained above, this CAFR includes six 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 68, 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.
- The Schedule of Investment Returns – Defined Benefit Pension Plan, page 68, 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 Employer Pension Plan Contributions, on pages 69 – 70, 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 Funding Progress – OPEB Plans, page 71, contain actuarial information about the status of the other postemployment plans from an ongoing, long-term perspective, showing whether there are sufficient assets to pay postemployment benefits when due. Valuation Assets in excess of Actuarial Liabilities would indicate that sufficient assets have been accumulated as of the valuation date to fund the future benefits of current members and retirees.
- The Schedules of Employer Contributions – OPEB Plans, page 72, contain historical trend information regarding the value of the total annual contributions employers must pay and the actual contributions made to meet this requirement.
- The Schedule of Claims Development Information for SRHIA, page 73, shows earned revenues and expenses over the past six years.

Other Supplemental Information

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

- The Schedule of Fiduciary Net Position and Schedule of Changes in Fiduciary Net Position – Defined Benefit Pension Plan, pages 74 and 75, display the components of the defined benefit pension plan.
- The Schedule of Administrative Expenses and Schedule of Payments to Consultants and Contractors on pages 76 and 77 show the costs of managing the System.
- The Summary of Investment Fees, Commissions, and Expenses on page 78 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 2016, with \$71,331.6 million restricted for pension, IAP, OPEB, and deferred compensation benefits.
- Fiduciary net position decreased by \$2,533.5 million, or 3.4 percent, during the fiscal year, as benefit payments exceeded contributions, as well as the decrease in value of investments.
- PERS' funding objective is to meet long-term benefit obligations. As of December 31, 2015, the date of the latest actuarial funding valuation, the funded ratio of the defined benefit pension plan, including side accounts, was 78.7 percent. In general, this means that for every dollar of pension benefits due, PERS has approximately \$0.79 available for payment.

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- Revenues (additions to fiduciary net position), which include member and employer contributions of \$1,720.8 million and net income from investment activities totaling \$493.0 million, fell 51.4 percent to \$2,218.9 million, for fiscal year 2016, compared to \$4,566.7 in fiscal year 2015.
- Expenses (deductions from fiduciary net position) increased 7.3 percent to \$4,752.4 million during the fiscal year from \$4,429.8 million in fiscal year 2015, primarily due to increased benefit payments.

FIDUCIARY NET POSITION

The condensed comparative summaries of Fiduciary Net Position below, and on page 19 demonstrate that the pension trust funds are primarily focused on investments and net position (reserves).

- The net position of the Defined Benefit Pension Plan decreased approximately \$2,841.6 million, or 4.4 percent, during the year ended June 30, 2016, primarily due to the 4.6 percent decline in the value of investments.
- The net position of the OPSRP IAP increased approximately \$269.9 million, or 3.9 percent, during the year ended June 30, 2016, as the value of investments grew slightly.
- The net position of the deferred compensation plan increased approximately \$17.9 million, or 1.2 percent, during the year ended June 30, 2016, due to a slight increase in the value of investments.
- The net position of the RHIA increased approximately \$14.0 million, or 3.3 percent, during the year ended June 30, 2016, as the value of investments grew 4.5 percent as employer contributions more than offset increases in healthcare premium subsidies.
- The net position of the RHIPA increased approximately \$6.3 million, or 71.3 percent, during the year ended June 30, 2016, as the value of investments grew 67.0 percent due to an increase in the employer contributions rate.

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

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2016	2015	2016	2015	2016	2015
Cash and Receivables	\$ 4,264,917	\$ 4,593,950	\$ 472,842	\$ 472,191	\$ 65,795	\$ 63,969
Investments at Fair Value	59,792,054	62,663,003	6,964,348	6,719,214	1,493,347	1,476,789
Securities Lending						
Collateral	1,332,772	1,502,082	156,920	163,078	11	11
Other	37,643	40,342	289	311	—	—
Total Assets	65,427,386	68,799,377	7,594,399	7,354,794	1,559,153	1,540,769
Investment Purchases	1,904,658	2,258,427	182,107	208,607	645	578
Securities Lending						
Payable	1,335,499	1,504,104	157,240	163,297	11	11
Other Payables	105,170	113,220	15,180	12,950	710	292
Total Liabilities	3,345,327	3,875,751	354,527	384,854	1,366	881
Total Net Position	\$ 62,082,059	\$ 64,923,626	\$ 7,239,872	\$ 6,969,940	\$ 1,557,787	\$ 1,539,888

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

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2016	2015	2016	2015
Cash and Receivables	\$ 32,050	\$ 33,165	\$ 3,394	\$ 1,793
Investments at Fair Value	423,495	405,091	12,063	7,223
Securities Lending Collateral	9,548	9,845	277	179
Other	33	31	1	1
Total Assets	465,126	448,132	15,735	9,196
Investment Purchases	13,825	15,227	321	224
Securities Lending Payable	9,568	9,858	277	179
Other Payables	4,831	120	118	27
Total Liabilities	28,224	25,205	716	430
Total Net Position	\$ 436,902	\$ 422,927	\$ 15,019	\$ 8,766

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.

- Employer contributions to the defined benefit pension plan decreased by \$145.9 million, or 13.0 percent, in fiscal year 2016. This decrease was primarily due to the receipt of \$175 million in Unfunded Actuarial Liability (UAL) side account payments in fiscal year 2015 and none in fiscal year 2016. Adjusting for last year's side account payments, the net change was effectively an increase of \$29.1 million, or 3.1 percent. This increase in contributions is attributable to an increase in covered salaries in fiscal year 2016.
- Employer contributions to the RHIA decreased \$9.0 million to \$44.6 million in fiscal year 2016 compared to \$53.6 million in fiscal year 2015, a 16.9 percent decrease. This decrease was primarily due to a 10.2 percent decrease in the employer contribution rate.
- Employer contributions to the RHIPA were \$11.0 million in fiscal year 2016 compared to \$6.9 million in fiscal year 2015, an increase of \$4.1 million or 59.2 percent, due to a 63.0 percent increase in the contribution rate.
- Member contributions to the Defined Benefit Pension Plan increased by \$428.9 thousand, or 3.1 percent, in fiscal year 2016 due to an increase in service credit purchases. Member contributions to the defined benefit pension plan have been closed since 2004 except for judge members.
- Member contributions to the IAP increased slightly by \$3.0 million, or 0.5 percent, as covered salaries increased due to an increase in OPSRP members from fiscal year 2015 to fiscal year 2016, offset by a decline in Tier One/Tier Two members.
- Member contributions to the deferred compensation plan increased by \$7.5 million, or 7.5 percent, in fiscal year 2016. Active membership increased 4.6 percent from 22,243 to 23,269 during the year. Ad-

Oregon Public Employees Retirement System

ditionally there were increased rollovers into the deferred compensation plan, as well as an increase in salary-based contributions.

- Net investment and other income decreased due to volatile financial markets:
 - ◊ Defined benefit pension plan: \$413.9 million, a \$1,950.6 million, or 82.5 percent, decrease over the fiscal year 2015 gain of \$2,364.5 million
 - ◊ IAP: \$76.5 million in fiscal year 2016, a \$200.4 million, or 72.4 percent, decrease from the fiscal year 2015 gain of \$276.9 million.
 - ◊ Retirement Health Insurance Account: \$4.2 million, a \$11.4 million, or 72.8 percent, decrease from the fiscal year 2015 gain of \$15.6 million.
 - ◊ Retiree Health Insurance Premium Account: decreased \$38.9 thousand to \$228.1 thousand, a 14.6 percent decrease over the fiscal year 2015 gain of \$266.9 thousand.
 - ◊ Deferred compensation plan: \$3.2 million, a \$45.5 million, or 93.5 percent, decrease from the fiscal year 2015 gain of \$48.6 million.

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 \$4,247.0 million in fiscal year 2016, a \$268.7 million, or 6.8 percent, increase over fiscal year 2015 expenses of \$3,979.4 million, primarily due to the restoration of cost of living (COLA) payments to benefit recipients as a result of the *Moro* decision in April 2015, as well as the annual cost of living adjustment. The increase in benefit payments during the fiscal year produced a decrease in net position.
- IAP benefit and other payments increased by \$45.5 million, or 13.9 percent, during the year, from \$327.5 million in fiscal year 2015 to \$373.0 million in fiscal year 2016. Accounts withdrawn increased due to an increase in service retirements for the year.
- Deferred compensation benefits and other expenses increased by \$7.4 million, or 8.6 percent, from \$85.2 million in fiscal year 2015 to \$92.6 million in fiscal year 2016. Benefit payments were higher due to increased retirement activity.
- RHIA healthcare premium and other payments increased by \$1.7 million, or 5.0 percent, from \$33.2 million in fiscal year 2015 to \$34.9 million in fiscal year 2016 due to an increase in participants.
- RHIPA healthcare premium and other payments increased by \$523 thousand, or 11.8 percent, from \$4.4 million in fiscal year 2015 to \$4.9 million in fiscal year 2016, primarily due to increased Healthcare Premium Subsidies and subsidy tier allocation, which is based on the years of service.

The tables on page 21 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 Years Ending June 30:

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2016	2015	2016	2015	2016	2015
Additions:						
Employer Contributions	\$ 977,332	\$ 1,123,257	\$ —	\$ —	\$ —	\$ —
Member Contributions	14,214	13,785	566,450	563,418	107,286	99,797
Net Investment and Other Income	413,916	2,364,479	76,509	276,949	3,167	48,617
Total Additions	<u>1,405,462</u>	<u>3,501,521</u>	<u>642,959</u>	<u>840,367</u>	<u>110,453</u>	<u>148,414</u>
Deductions:						
Pension Benefits	4,193,308	3,927,167	364,549	319,979	91,351	84,178
Other	53,721	52,221	8,478	7,565	1,203	1,018
Total Deductions	<u>4,247,029</u>	<u>3,979,388</u>	<u>373,027</u>	<u>327,544</u>	<u>92,554</u>	<u>85,196</u>
Net Increase (Decrease)	(2,841,567)	(477,867)	269,932	512,823	17,899	63,218
Net Position						
Beginning of Year	64,923,626	65,401,493	6,969,940	6,457,117	1,539,888	1,476,670
End of Year	<u>\$ 62,082,059</u>	<u>\$ 64,923,626</u>	<u>\$ 7,239,872</u>	<u>\$ 6,969,940</u>	<u>\$ 1,557,787</u>	<u>\$ 1,539,888</u>

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

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2016	2015	2016	2015
Additions:				
Employer Contributions	\$ 44,588	\$ 53,648	\$ 10,967	\$ 6,887
Net Investment and Other Income	4,247	15,607	228	267
Total Additions	<u>48,835</u>	<u>69,255</u>	<u>11,195</u>	<u>7,154</u>
Deductions:				
Healthcare Premium Subsidies	33,603	31,923	4,683	4,231
Other	1,256	1,279	260	189
Total Deductions	<u>34,859</u>	<u>33,202</u>	<u>4,943</u>	<u>4,420</u>
Net Increase	13,976	36,053	6,252	2,734
Net Position				
Beginning of year	422,926	386,874	8,767	6,032
End of Year	<u>\$ 436,902</u>	<u>\$ 422,927</u>	<u>\$ 15,019</u>	<u>\$ 8,766</u>

PROPRIETARY FUND

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

NET POSITION

- The net position of the SRHIA as of June 30, 2016, was \$47,371 million, a \$7.4 million, or 13.5 percent decrease over fiscal year 2015. This decrease was primarily due to a decrease in cash resulting from higher medical claims cost and prescription drug costs trending in the double digits, impacting the minimum premium funding arrangement.

CHANGES IN NET POSITION

- SRHIA insurance premium and other revenue for the year ended June 30, 2016, was \$197.9 million, a \$28.7 million, or 12.7 percent, decrease from fiscal year 2015. This decrease is primarily due to the initial of recognition of \$34.3 million in reinsurance settlements in fiscal year 2015 compared to \$29.0 million in fiscal year 2016. This decrease can also be attributed to the Moda Advantage medical plan moving from a minimum premium funding arrangement to a conventionally insured plan in 2016.
- SRHIA healthcare and other payments for the year ended June 30, 2016, decreased \$39.0 million, or 16.0 percent, from \$244.3 million in fiscal year 2015 to \$205.3 million in fiscal year 2016 due primarily to the Moda Advantage plan moving from a minimum premium funding arrangement to a conventionally insured plan, as well as decreases in administrative and claims expense.

The tables below 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	
	2016	2015
Cash and Receivables	\$ 63,621	\$ 72,908
Net Pension Asset	—	44
Securities Lending Collateral	660	2,802
Total Assets	<u>64,281</u>	<u>75,754</u>
Deferred Outflow of Resources:		
Pensions	<u>29</u>	<u>16</u>
Claims Payable	9,200	14,798
Other Payables	6,910	3,293
Securities Lending Payable	660	2,802
Net Pension Liability	114	—
Other Liabilities	<u>28</u>	<u>28</u>
Total Liabilities	<u>16,912</u>	<u>20,921</u>
Deferred Inflow of Resources:		
Pensions	<u>28</u>	<u>85</u>
Total Net Position	<u>\$ 47,370</u>	<u>\$ 54,764</u>

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

	Standard Retiree Health Insurance Account	
	2016	2015
Revenues:		
Insurance Premiums	\$ 168,655	\$ 191,970
Reinsurance Reimbursements	29,008	34,259
Investment Income	259	358
Other Income	—	21
Total Revenues	<u>197,922</u>	<u>226,608</u>
Expenses:		
Claims	184,613	211,904
Change in Estimated Liabilities	(5,598)	306
Administrative and Other Expense	26,301	32,091
Total Expenses	<u>205,316</u>	<u>244,301</u>
Net Decrease	(7,394)	(17,693)
Net Position		
Beginning of Year	54,764	72,457
End of Year	<u>\$ 47,370</u>	<u>\$ 54,764</u>

PLAN MEMBERSHIP

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

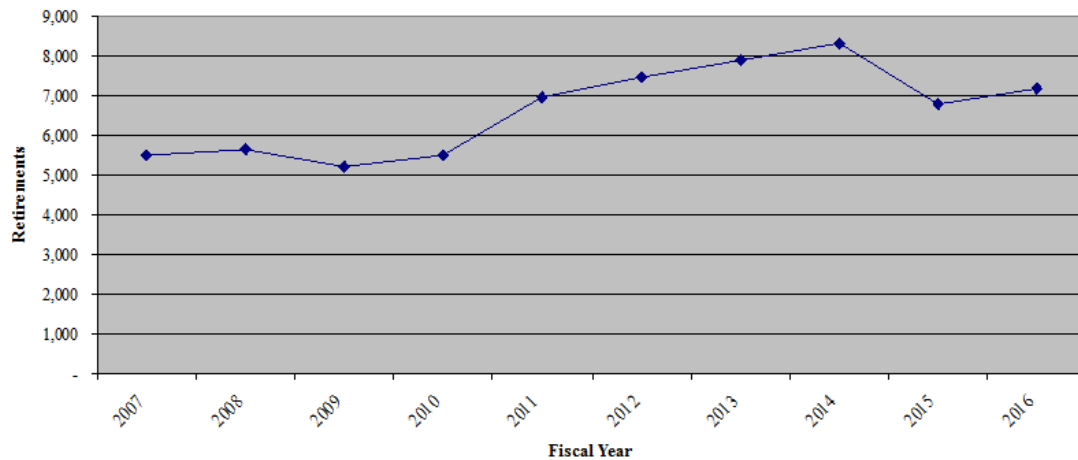
TABLE 7
CHANGES IN PLAN MEMBERSHIP
As of June 30:

	2016	2015	Percentage Change
Retirees and beneficiaries benefits:			
General	125,742	122,202	2.9 %
Police and Fire	10,693	10,304	3.8
Total	<u>136,435</u>	<u>132,506</u>	3.0
Current and terminated employees:			
Vested:			
General	198,055	194,588	1.8
Police and Fire	17,307	16,389	5.6
Nonvested:			
General	2,141	2,293	(6.6)
Police and Fire	98	106	(7.5)
Total	<u>217,601</u>	<u>213,376</u>	2.0 %

SERVICE RETIREMENTS

Service retirements increased by 5.7 percent in fiscal year 2016, primarily due to an increase in inactive members receiving benefits. Service retirements in fiscal year 2016 were 7,163 compared to 6,779 in fiscal year 2015.

TABLE 8
SERVICE RETIREMENTS
By Fiscal Year



NET PENSION LIABILITY

The Employers' Net Pension Liability (NPL) as of June 30, 2016, was \$15,012.3, compared to a Net Pension Liability of \$5,741.5 as of June 30, 2015. The change was primarily the result of following factors:

- ◆ The total pension liability increased primarily due to changes in assumptions, including lowering the discount rate from 7.75 percent to 7.50 percent, and interest on the liability as current active members get closer to retirement.
- ◆ Fiduciary net position decreased as benefit payments exceeded contributions and net investment income.

INVESTMENT ACTIVITIES

During fiscal year 2016, investments decreased by 3.6 percent over the prior fiscal year as markets continued to experience significant volatility. While most asset classes experienced negative investment returns, the Real Estate, Alternative, and Opportunity portfolios experienced increases. Public equity decreased approximately \$3,209.3 million, or 10.6 percent, as domestic exhibited modest returns, and international equity suffered investment losses. Investments in debt securities decreased by \$941.0 million, or 6.0 percent as a result of transactions made in accordance with the Oregon Investment Council's asset allocation policy. Private equity investments were down approximately \$1,002.4 million for the year. The Opportunity Portfolio increased approximately \$290.2 million during the fiscal year, and Alternative asset class increased by \$1,450.6, or 96.8 percent. The fair value of real estate investments increased by \$826.0 million due to gains in both real property and real estate investment trusts. One-year returns on asset classes and comparative benchmarks are presented in the table on the next page.

Table 9
Investment Results*
Periods Ending June 30,

	2016	2015
Total Portfolio, Excluding Variable Account	1.21 %	4.32 %
Policy Benchmark ¹	1.62	5.47
Variable Account	(3.43)	1.15
Benchmark: MSCI All Country World Investable Market Index Net	(3.87)	0.81
Domestic Stocks	(0.28)	6.83
Benchmark: Russell 3000 Index	2.14	7.29
International Stocks	(8.12)	(3.07)
Benchmark: MSCI All Country World ex-US Investable Market Index Net	(9.61)	(4.97)
Fixed Income Segment	3.63	1.47
Benchmark: Custom Index ²	3.67	1.38
Real Estate ³	10.86	12.04
Benchmark: NCREIF Property Index ³	11.81	12.72
Private Equity ⁴	4.52	9.54
Benchmark: Russell 3000 Index + 300 bps ³	2.65	15.71
Alternative Equity	(0.79)	(1.99)
Benchmark: Consumer Price Index + 400bps	5.04	4.13
Opportunity Portfolio	0.36	(0.73)
Benchmark: Russell 3000 Index	2.14	7.29

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 Prior to October 1, 2013, policy benchmark was 46% Morgan Stanley Capital International All Country World Index (MSCI ACWI) Net, 27% Custom Fixed Income (FI) Benchmark, 16% Russell 3000 + 300bps, and 11% National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index.

From October 1, 2013 through March 31, 2016, policy benchmark was 41.50% MSCI ACWI Net, 23.50% Custom FI Benchmark, 20% Russell 3000 + 300bps, 12.50% NCREIF Property, and 2.50% Consumer Price Index + 400bps.

From April 1, 2016 to current, policy benchmark is 41.50% MSCI ACWI Net, 23.50% Custom FI Benchmark, 20% Russell 3000 + 300bps, and 2.50% Consumer Price Index + 400bps.

² Prior to February 28, 2011, index was Oregon Custom FI 90/10 Benchmark. (90% Barclays Capital (BC) U.S. Universal Index and 10% Solomon Smith Barney Inc. Non-US World Gov't Bond Hedged Index).

From March 1, 2011 to December 31, 2013, index was 60% 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 Time-weighted returns are calculated using quarterly basis based on the quarter lagged market values that are cash flow adjusted.

⁴ Beginning in April 2010, the return combines the estimated return using the internal rate of return for the most recent lagged quarter with a revision component that trues up the past two quarters' reported returns with the past two quarters' revised and final returns.

* 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.

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:

- ◆ The PERS Board lowered the assumed rate for PERS transactions to 7.50 percent at its September 25, 2015 meeting, effective January 1, 2016 for Tier One interest crediting and updated actuarial equivalency factors. This decision was based on data from the investment forecasts and review of the guiding principles presented by the actuaries. The Oregon Investment Council also supported a decrease in the assumed rate due to the collapse in bond yields and persistent downward pressures on interest rates.
- ◆ Effective with the December 31, 2014 actuarial valuation, issued in November 2015, assumptions were changed, which are expected to have a significant impact on future contribution rates. These changes include the lowering of assumed investment returns to 7.50 percent, the assumed inflation was lowered to 2.50 percent, the healthy mortality assumption was changed to reflect an updated mortality improvement scale for all groups, and updated assumptions for merit increases, unused sick leave, and vacation pay.

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.

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Oregon Public Employees Retirement System

Statement of Fiduciary Net Position

Pension and Other Postemployment Plans

As of June 30, 2016, with Comparative Totals as of June 30, 2015

	Defined Benefit Pension Plan	Oregon Public Service Retirement Plan Individual Account Program	Defined Benefit OPEB Plans	
			Retirement Health Insurance Account	Retiree Health Insurance Premium Account
Assets:				
Cash and Cash Equivalents	\$ 2,386,926,315	\$ 310,376,185	\$ 20,800,162	\$ 1,560,687
Receivables:				
Employer	54,904,880	—	1,952,195	1,482,397
Plan Member	—	14,415,424	—	—
Interest and Dividends	275,697,607	32,972,968	1,972,145	56,173
Member Loans	—	—	—	—
Investment Sales and Other Receivables	990,866,722	108,521,966	6,694,341	247,134
Transitional Liability	555,342,138	—	—	—
Total Receivables	<u>1,876,811,347</u>	<u>155,910,358</u>	<u>10,618,681</u>	<u>1,785,704</u>
Due from Other Funds	1,178,813	6,555,070	631,538	47,977
Investments:				
Debt Securities	12,885,495,925	1,515,791,687	92,173,708	2,625,409
Public Equity	23,037,166,760	2,640,668,952	160,576,318	4,573,740
Real Estate	7,631,859,552	897,777,574	54,592,916	1,554,985
Private Equity	12,403,949,266	1,459,144,707	88,729,064	2,527,295
Alternative Equity	2,621,001,445	308,322,801	18,748,787	534,027
Opportunity Portfolio	1,212,581,250	142,642,595	8,673,947	247,062
Total Investments	<u>59,792,054,198</u>	<u>6,964,348,316</u>	<u>423,494,740</u>	<u>12,062,518</u>
Securities Lending Collateral	1,332,772,426	156,919,670	9,548,422	276,905
Prepaid Expenses	5,724,946	—	32,906	938
Capital Assets at Cost, Net	31,918,036	289,021	—	—
Total Assets	<u>65,427,386,081</u>	<u>7,594,398,620</u>	<u>465,126,449</u>	<u>15,734,729</u>
Liabilities:				
Investment Purchases and Accrued Expenses	1,904,657,595	182,107,294	13,824,667	320,629
Deposits and Other Liabilities	97,268,525	14,376,420	3,585,678	61,355
Due to Other Funds	7,234,586	802,592	1,245,442	56,801
Bonds Payable	667,460	—	—	—
Securities Lending Collateral Due Borrowers	1,335,498,813	157,240,390	9,567,924	277,461
Total Liabilities	<u>3,345,326,979</u>	<u>354,526,696</u>	<u>28,223,711</u>	<u>716,246</u>
Net Position Restricted for Pension and Other Postemployment Benefits	<u>\$ 62,082,059,102</u>	<u>\$ 7,239,871,924</u>	<u>\$ 436,902,738</u>	<u>\$ 15,018,483</u>

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

Deferred Compensation Plan		2016	2015
\$	53,974,540	\$ 2,773,637,889	\$ 3,207,777,422
	—	58,339,472	48,200,678
	—	14,415,424	14,349,714
	379,210	311,078,103	318,453,877
	11,343,303	11,343,303	11,242,732
	98,010	1,106,428,173	981,774,531
	—	555,342,138	576,225,687
	<u>11,820,523</u>	<u>2,056,946,613</u>	<u>1,950,247,219</u>
	—	8,413,398	7,043,321
	272,422,603	14,768,509,332	15,709,553,788
	1,220,924,686	27,063,910,456	30,273,207,903
	—	8,585,785,027	7,759,820,864
	—	13,954,350,332	14,956,767,833
	—	2,948,607,060	1,498,022,765
	—	1,364,144,854	1,073,948,950
	<u>1,493,347,289</u>	<u>68,685,307,061</u>	<u>71,271,322,103</u>
	10,756	1,499,528,179	1,675,194,057
	—	5,758,790	5,834,155
	—	32,207,057	34,850,765
	<u>1,559,153,108</u>	<u>75,061,798,987</u>	<u>78,152,269,042</u>
	645,317	2,101,555,502	2,483,062,894
	503,043	115,795,021	118,516,056
	206,828	9,546,249	6,778,372
	—	667,460	1,315,411
	10,756	1,502,595,344	1,677,449,285
	<u>1,365,944</u>	<u>3,730,159,576</u>	<u>4,287,122,018</u>
\$	<u>1,557,787,164</u>	\$ <u>71,331,639,411</u>	\$ <u>73,865,147,024</u>

Oregon Public Employees Retirement System

Statement of Changes in Fiduciary Net Position

Pension and Other Postemployment Plans

For the Year Ended June 30, 2016, with Comparative Totals for the Year Ended June 30, 2015

	Oregon Public Service Retirement Plan Individual Account Program		Defined Benefit OPEB Plans	
	Defined Benefit Pension Plan		Retirement Health Insurance Account	Retiree Health Insurance Premium Account
Additions:				
Contributions:				
Employer	\$ 977,332,329	\$ —	\$ 44,587,963	\$ 10,966,837
Plan Member	14,214,341	566,450,233	—	—
Total Contributions	991,546,670	566,450,233	44,587,963	10,966,837
Investment Income:				
Net Appreciation/(Depreciation) in Fair Value of Investments	(518,809,802)	(37,224,036)	(2,195,070)	79,697
Interest, Dividends and Other Investment Income	1,406,743,678	170,590,617	9,793,487	232,701
Total Investment Income	887,933,876	133,366,581	7,598,417	312,398
Less Investment Expense	(488,299,660)	(58,699,838)	(3,426,113)	(85,923)
Net Investment Income	399,634,216	74,666,743	4,172,304	226,475
Securities Lending Income:				
Securities Lending Income	16,311,853	1,836,757	111,501	2,484
Less Securities Lending Expense	(5,375,711)	(612,731)	(37,253)	(902)
Net Securities Lending Income	10,936,142	1,224,026	74,248	1,582
Other Income	3,345,495	618,233	—	—
Total Additions	1,405,462,523	642,959,235	48,834,515	11,194,894
Deductions:				
Benefits	4,183,382,566	364,549,091	—	—
Death Benefits	9,925,146	—	—	—
Refunds of Contributions	13,154,578	—	—	—
Administrative Expense	40,567,225	8,478,008	1,256,017	259,850
Healthcare Premium Subsidies	—	—	33,602,540	4,682,975
Total Deductions	4,247,029,515	373,027,099	34,858,557	4,942,825
Net Increase (Decrease)	(2,841,566,992)	269,932,136	13,975,958	6,252,069
Net Position Restricted for Pension and Other Benefits				
Beginning of Year	64,923,626,094	6,969,939,788	422,926,780	8,766,414
End of Year	\$ 62,082,059,102	\$ 7,239,871,924	\$ 436,902,738	\$ 15,018,483

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

Deferred Compensation Plan	2016	2015
\$ —	\$ 1,032,887,129	\$ 1,183,792,398
107,286,636	687,951,210	676,999,827
<u>107,286,636</u>	<u>1,720,838,339</u>	<u>1,860,792,225</u>
(5,318,283)	(563,467,494)	1,671,240,871
10,559,529	1,597,920,012	1,566,166,479
<u>5,241,246</u>	<u>1,034,452,518</u>	<u>3,237,407,350</u>
(3,212,093)	(553,723,627)	(547,523,267)
<u>2,029,153</u>	<u>480,728,891</u>	<u>2,689,884,083</u>
43	18,262,638	15,862,667
(43)	(6,026,640)	(3,726,619)
<u>—</u>	<u>12,235,998</u>	<u>12,136,048</u>
1,137,703	5,101,431	3,899,718
<u>110,453,492</u>	<u>2,218,904,659</u>	<u>4,566,712,074</u>
91,351,490	4,639,283,147	4,325,279,156
—	9,925,146	6,044,180
—	13,154,578	16,481,215
1,202,786	51,763,886	45,791,941
—	38,285,515	36,153,628
<u>92,554,276</u>	<u>4,752,412,272</u>	<u>4,429,750,120</u>
17,899,216	(2,533,507,613)	136,961,954
1,539,887,948	73,865,147,024	73,728,185,070
<u><u>\$ 1,557,787,164</u></u>	<u><u>\$ 71,331,639,411</u></u>	<u><u>\$ 73,865,147,024</u></u>

Oregon Public Employees Retirement System

Statement of Net Position

Proprietary Fund

As of June 30, 2016, with Comparative Totals as of June 30, 2015

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2016	2015
Assets:		
Current Assets		
Cash and Cash Equivalents	\$ 24,217,781	\$ 52,191,378
Reinsurance Reimbursements and Rebate Receivables	38,186,226	20,716,315
Due from Other Funds	1,217,146	—
Securities Lending Collateral	659,957	2,802,529
Total Current Assets	64,281,110	75,710,222
Noncurrent Assets		
Net Pension Asset	—	43,819
Total Noncurrent Assets	—	43,819
Total Assets	64,281,110	75,754,041
Deferred Outflow of Resources		
Pensions	29,294	16,218
Total Deferred Inflow of Resources	29,294	16,218
Liabilities:		
Current Liabilities		
Estimated Insurance Claims Due	9,200,000	14,798,000
Accrued Expenses	6,826,111	3,028,020
Due to Other Funds	84,295	264,950
Securities Lending Collateral Due Borrowers	659,957	2,802,529
Total Current Liabilities	16,770,363	20,893,499
Noncurrent Liabilities		
Other Liabilities	28,119	27,859
Net Pension Liability	113,625	—
Total Noncurrent Liabilities	141,744	27,859
Total Liabilities	16,912,107	20,921,358
Deferred Inflow of Resources		
Pensions	27,665	84,553
Total Deferred Inflow of Resources	27,665	84,553
Total Unrestricted Net Position	\$ 47,370,632	\$ 54,764,348

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

Statement of Revenues, Expenses, and Changes in Net Position

Proprietary Fund

For the Year Ended June 30, 2016, with Comparative Totals for the Year Ended June 30, 2015

	Enterprise Fund	
	Standard Retiree Health Insurance	
	2016	2015
Operating Revenues:		
Insurance Premium Revenue	\$ 168,655,173	\$ 191,970,498
Reinsurance Reimbursements	29,008,480	34,258,822
Other Income	—	21,841
Total Operating Revenues	<u>197,663,653</u>	<u>226,251,161</u>
Operating Expenses:		
Claims Expense	184,612,618	211,904,113
(Decrease)/Increase in Estimated Liabilities	(5,598,000)	306,000
Administrative Expense	26,301,560	32,090,976
Total Operating Expenses	<u>205,316,178</u>	<u>244,301,089</u>
Operating Loss	(7,652,525)	(18,049,928)
Non-Operating Revenues:		
Interest, Dividends, and Other Investment Income	258,809	357,606
Securities Lending Income	7,374	4,794
Less Securities Lending Expense	<u>(7,374)</u>	<u>(4,794)</u>
Net Securities Lending Income	—	—
Total Non-Operating Revenues	<u>258,809</u>	<u>357,606</u>
Change in Unrestricted Net Position	(7,393,716)	(17,692,322)
Total Unrestricted Net Position		
Beginning of Year	<u>54,764,348</u>	<u>72,456,670</u>
End of Year	\$ <u>47,370,632</u>	\$ <u>54,764,348</u>

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

Oregon Public Employees Retirement System

Statement of Cash Flows

Proprietary Fund

For the Year Ended June 30, 2016, with Comparative Totals for the Year Ended June 30, 2015

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2016	2015
Cash Flows from Operating Activities:		
Insurance Premiums and Reinsurance Reimbursements	\$ 178,976,596	\$ 205,513,005
Claims Paid	(184,612,618)	(211,904,113)
Other Receipts	—	21,841
Other Payments	(22,596,384)	(39,382,636)
Net Cash Used for Operating Activities	(28,232,406)	(45,751,903)
Cash Flows from Investing Activities:		
Interest and Dividends Received	258,809	357,606
Net Decrease in Cash and Cash Equivalents	(27,973,597)	(45,394,297)
Cash and Cash Equivalents Beginning of Year	52,191,378	97,585,675
Cash and Cash Equivalents End of Year	\$ 24,217,781	\$ 52,191,378
Reconciliation of Operating Loss to Net Cash Used for Operating Activities:		
Operating Loss	\$ (7,652,525)	\$ (18,049,928)
Changes in assets, deferred inflows of resources, liabilities, and deferred outflows of resources:		
Reinsurance Reimbursements and Rebate Receivables	(17,469,911)	(20,716,315)
Due from Other Funds	(1,217,146)	—
Net Pension Asset/Liability	157,444	(43,819)
Deferred Outflows of Resources	(13,076)	(16,218)
Estimated Insurance Claims Due	(5,598,000)	306,000
Accrued Expenses	3,798,091	(7,533,704)
Due to Other Funds	(180,655)	218,681
Other Liabilities	260	(1,153)
Deferred Inflows of Resources	(56,888)	84,553
Net Cash Used for Operating Activities	\$ (28,232,406)	\$ (45,751,903)

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 PERS assets. As a result of this fiduciary responsibility, the Oregon Public Employees Retirement System (PERS or the System) 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, 2016, in accordance with Governmental Accounting Standards Board (GASB) Statements and generally accepted accounting principles 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). Enterprise 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 benefit, 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
- Retirement Health Insurance Account
- Retiree Health Insurance Premium Account
- Deferred Compensation Fund (Oregon Savings Growth Plan).

PERS' public entity risk pool activity is accounted for in a single 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 plan.

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 pro-

prietary 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 resulting from contributions made subsequent to the measurement date will be recognized as a reduction of the net pension liability in the following year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense for approximately each of the subsequent four years.

D. Budgetary Data

Only administrative expenses are subject to biennial legislative budget control. The Legislature exercises this control at the agency level. Any unobligated balance lapses at the end of each biennium.

Encumbrance accounting is allowed only during the biennium. All encumbrances lapse at the end of the biennium except capital construction, capital improvements, and disputed claims.

Budgetary accounting is not consistent with generally accepted accounting principles (GAAP) because the measurement focus is on decreases in financial resources rather than changes in net position.

E. 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 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), 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 in-

Oregon Public Employees Retirement System

vested 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.

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, 2016, 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, 2016, 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, 2016 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, alternatives, and real estate 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 for fiscal years beginning in 2014. The previous allocation was amended to reduce debt securities and public equity holdings and to increase private equity, real estate and alternative equity holdings. See the Annual Money-Weighted Return table on page 68.

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	<u>100.0%</u>

See Geometric Return Table 31 on page 66

F. 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.

G. 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.

H. 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.

I. 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 for the year ended June 30, 2015, from which the summarized information was derived.

J. GASB Pronouncements

Adoption of New GASB Pronouncements

During the fiscal year ended June 30, 2016, PERS evaluated the following GASB Pronouncements:

GASB Statement No. 72, *Fair Value Measurement and Application*, issued in February 2015. This Statement addresses accounting and financial reporting issues related to fair value measurements. The definition of *fair value* is 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. This Statement provides guidance for determining a fair value measurement for financial reporting purposes, as well as guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This Statement is effective for the fiscal year ended June 30, 2016. PERS implemented this new pronouncement in the current year.

GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*, issued in June 2015. This Statement establishes requirements for defined benefit pensions that are not within the scope of Statement No. 68, *Accounting and Financial Reporting for Pensions*, as well as for the assets accumulated for purposes of providing those pensions. It also amends certain provisions of Statement No. 67, *Financial Reporting for Pension Plans*, and Statement 68 for pension plans and pensions that are within their respective scopes. This

Oregon Public Employees Retirement System

Statement is effective for the fiscal year ended June 30, 2016, although early implementation is encouraged.

PERS evaluated the requirements of GASB Statement No. 73 and determined the provisions applicable to PERS were limited to the amendments, or clarifications, of certain provisions of Statement No. 67, *Financial Reporting for Pension Plans*. As such, PERS has been compliant with the provisions of GASB Statement No. 73 since implementing GASB Statement No. 67 for fiscal year ended June 30, 2014.

GASB Statement No. 82, *Pension Issues—an amendment of GASB Statements No. 67, No. 68, and No. 73*, was issued March 2016. The objective of this Statement is to address certain issues that have been raised with respect to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions*, and No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68*. Specifically, this Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. This Statement is effective for the fiscal year ended June 30, 2017; however, early application is encouraged. PERS implemented this pronouncement in the current year.

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, 2016, there were 906 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 state Senate. The governor

designates the chairperson. One member must be a public employer manager or a local elected official, one 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, 2016, is shown in Table 2 on the next page.

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 58 for Tier One. As of June 30, 2016, there were 28,605 active plan members, 121,585 inactive plan members or their beneficiaries currently receiving benefits, 15,106 inactive plan members entitled to but not yet receiving benefits, and 10 inactive plan members not eligible for refund or retirement, for a total of 165,306 Tier One members. As of June 30, 2016, there were 39,205 active plan members, 12,336 inactive plan members or their beneficiaries currently receiving benefits, 15,291 inactive plan members entitled to but not yet receiving benefits, and 718 inactive plan members not eligible for refund or retirement, for a total of 67,550 Tier Two members in the System.

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 (defined benefit) and the Individual Account Program. Membership includes public employees hired on or after August 29, 2003. As of June 30, 2016, there were 103,866 active plan members, 2,514 inactive plan members or their beneficiaries currently receiving benefits, 4,775 inactive plan members entitled to but not yet receiving benefits, and 10,025 inactive plan members not eligible for refund or retirement, for a total of 121,180 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 Defined Benefit Plan accounts, but member contributions are now deposited into the member's IAP account, not into the member's Defined Benefit Plan 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.

TABLE 2

Plan Membership as of June 30, 2016	Employers	Defined Benefit Plan				Post-Employment Healthcare	
		Tier 1	Tier 2	OPSRP	Total	RHIA	RHIPA
Employers							
State Agencies	108						
School Districts	295						
Political Subdivisions	486						
Community Colleges	17						
Inactive Members - General Service							
Retirees and beneficiaries currently receiving benefits		111,635	9,559	2,363	123,557	43,117	1,148
Alternate Payees currently receiving benefits		575	1,607	3	2,185	n/a	n/a
Inactive members eligible for, but not yet receiving benefits		9,784	6,605	4,637	21,026	15,151	n/a
Inactive members eligible for refund value of account only		4,786	8,059	n/a ¹	12,845	n/a	n/a
Inactive members not eligible for refund or retirement		8	695	9,568	10,271	n/a	n/a
Inactive Members - Police and Fire							
Retirees and beneficiaries currently receiving benefits		9,227	828	148	10,203	1,776	106
Alternate Payees currently receiving benefits		148	342	0	490	n/a	n/a
Inactive members eligible for, but not yet receiving benefits		371	279	138	788	748	n/a
Inactive members eligible for refund value of account only		165	348	n/a ¹	513	n/a	n/a
Inactive members not eligible for refund or retirement		2	23	457	482	n/a	n/a
Active Members - General Service							
State Agencies		7,110	8,385	25,907	41,402	15,338	15,338
School Districts		11,076	15,863	41,647	68,586	26,683	
Political Subdivisions		6,413	8,617	22,976	38,006	14,904	
Community Colleges		1,139	1,721	5,200	8,060	2,827	
Active Members - Police and Fire							
State Agencies		1,109	1,954	3,403	6,466	3,050	3,050
School Districts		14	21	27	62	35	
Political Subdivisions		1,744	2,644	4,706	9,094	4,379	

¹ Defined benefit only. No individual accounts are maintained.

C. Plan Benefits

a. PERS Pension (Chapter 238)

1. Pension Benefits

The PERS retirement allowance is payable monthly for life. It may be selected from 13 retirement benefit options.

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 either 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 ORS Chapter 238 Defined Benefit Pension Plan is 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 aver-

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age 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 a variable equities investment account after retiring and may experience annual benefit fluctuations due to changes in the market value of equity investments.

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 (OPSRP DB)

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 mem-

ber's salary determined as of the last full month of employment before the disability occurred.

c. OPSRP Individual Account Program (OPSRP IAP)

1. Pension Benefits

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. Each distribution option has a \$200 minimum distribution limit.

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 defined benefit OPEB plan for 906 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, 2016, PERS employers contributed 0.08 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA benefits. PERS employers contributed 0.45 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

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	State and 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	13.66	13.66	11.94	14.24	14.99	7.33	11.44	0.08	0.09
Unfunded Actuarial Liability	(1.43)	4.57	9.25	3.27	(0.93)	0.61	0.61	0.45	0.35
Total Employer Contributions	12.23 %	18.23 %	21.19 %	17.51 %	14.06 %	7.94 %	12.05 %	0.53 %	0.44 %

¹Group average rates shown were effective as of July 1, 2015.

²A subcomponent of the State and Local Government Rate Pool; includes UAL payment rate offset.

³Does not include UAL payment rate offsets.

⁴Non-pooled Political Subdivisions are valued separately for the Defined Benefit Plan.

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December 31, 2013 actuarial valuation. This is included in the employer contribution rates listed in Table 3 on the previous page.

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 44,893 for the fiscal year ended June 30, 2016, and there were 67,216 active and 15,899 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 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, 2016, state agencies contributed 0.09 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIPA benefits. State agencies contributed 0.35 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, 2013 actuarial valuation, which eliminated the tax remedy payments for benefit. 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 1,254 for the fiscal year ended June 30, 2016. As of June 30, 2016, there were 18,388 active members who meet the requirements to receive RHIPA benefits when they retire. Inactive members are not eligi-

ble 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 60, 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 that 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, 2016, the fair value of investments was \$1,493.3 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, 2016, totaled \$11.3 million. Of that amount, \$9.1 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, 2016, was 23,269.

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, 2016, averaged 0.21 percent of amounts deferred.

Oregon Revised Statute 243.505 established a De-

ferred 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, 2016, there are 59,983 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 \$7.6 million as of June 30, 2016. Moda Health becomes responsible for claims in excess of \$200 thousand per year per individual and all claims in excess of contractually required reserves on deposit with Moda Health.

In fiscal year 2016, SRHIA recognized Reinsurance Reimbursement and Rebate receivables of approximately \$38.2 million. These receivables were primarily comprised of \$29.0 million in reinsurance settlements, \$2.9 million in outstanding drug rebates, and \$2.2 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 to 7.0 percent of salary and are remitted by participating employers, who may agree to make member contributions on the member's behalf. The contributions are either deducted from member salaries or paid by the employers. The Member Reserve, described in Note 7.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, 2013 actuarial valuation, which became effective July 1, 2015. 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 41.

1. PERS Defined Benefit Plan Contributions (ORS 238)

Pension rates for the State and Local Government Rate Pool were 18.23 percent, schools 21.19 percent, and judiciary 14.06 percent of PERS-covered salaries, effective July 1, 2015. Political subdivisions that have not joined the State and Local Government Pool had an average pension rate of 17.51 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 op-

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tion 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, 2013, the state agencies and political subdivisions had increases in employer contribution rates on July 1, 2015, while employer contribution rates for schools and the judiciary slightly decreased. These rate changes are measured against the actual average rates paid since July 1, 2013. The 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, 2015, through June 30, 2017, were 7.94 percent of covered salaries for general service employees and 12.05 percent of covered salaries for police and fire employees. These rates increased from 6.42 percent of covered salaries for general service and 9.15 percent of covered salaries for police and fire employees for the period July 1, 2013, through June 30, 2015. Each of these rates includes a component related to disability benefits for general service and police and fire members.

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

<u>Accounts Receivable</u>		
		June 30, 2016
Broker Receivable	\$	1,043,451,752
Strunk and Eugene Accrual		57,940,195
Overpaid Benefits		121,054
Other		4,915,172
Total Accounts Receivable	\$	1,106,428,173

The Strunk and Eugene Accrual resulted from recalculating benefits for recipients who received overpayments based on the reallocation of 1999 earnings. Approximately 80.1 percent of these receivables, or \$57.9 million, is expected to be collected after June 30, 2016.

Additionally, there were \$38.2 million in Reinsurance Reimbursements and Rebate receivables reported in the Statement of Net Position – Proprietary Fund.

B. Payables

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

TABLE 5

<u>Accounts Payable</u>		
		June 30, 2016
Broker Payable	\$	1,704,610,773
Pension Roll		337,479,310
Investment Fees		30,782,206
Death Benefits		20,756,106
Compensated Absences		1,816,391
Services and Supplies		1,073,279
Other		5,037,435
Total Accounts Payable	\$	2,101,555,500

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, and cash equivalents held by the health insurance provider. 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.

TABLE 6

<u>Depository Account</u>	<u>Bank Balance</u>
Insured	\$ 500,000
Oregon Short Term Fund	1,417,479,771
Health Insurance Claims Fund	7,363,058
Uninsured and uncollateralized	1,379,882,395
Total deposits	\$ 2,805,225,224

OSTF is separately audited by the Oregon Audits Division. The audited financial statements can be viewed at <http://sos.oregon.gov/audits/Documents/2016-19.pdf>. OSTF investment risks are addressed in the notes to those financial statements.

Health Insurance Claims Fund of \$7.6 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.

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, 2016, the carrying amount of PERS' deposits in OSTF totaled \$1,410.1 million, and the corresponding bank balance was \$1,417.5 million.

Investment managers' deposits with custodian banks consist of cash and cash equivalents that represent buying reserves. As of June 30, 2016, there was \$1,380.1 million on deposit for the accounts of the OPERF investment managers.

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, 2016, \$71.2 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 51.

3. Restricted Cash Equivalents

PERS' cash and cash equivalents at June 30, 2016, include collateral of \$55.8 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, 2016.

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.

Funds priced using a net asset value (NAV) that is published daily and validated with a sufficient level of observable activity are categorized in level 1. If observa-

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TABLE 7

Investments as of June 30, 2016	Fair Value
US Treasury Obligations	\$ 5,951,947,963
US Treasury Obligations - Strips	34,980,235
US Treasury Obligations - TIPS	164,041,060
US Federal Agency Mortgage Securities	844,720,460
US Federal Agency Mortgage TBAs	396,477,755
US Federal Agency Debt	15,924,372
US Federal Agency Strips	45,489,284
International Debt Securities	932,101,682
Non-Government Debt Securities	102,097,212
Corporate Bonds	2,171,364,559
Bank Loans	1,936,695,980
Municipal Bonds	38,716,191
Collateralized Mortgage Obligations	828,250,169
Asset-Backed Securities	473,850,591
Guaranteed Investment Contracts ¹	171,265,727
Domestic Fixed Income Funds	610,304,712
International Fixed Income Funds	50,281,380
Total Debt Securities	14,768,509,332
Derivatives in Asset Positions	13,813,635
Domestic Equity Securities	10,493,097,436
International Equity Securities	9,150,695,658
Domestic Equity Funds	2,665,179,334
Global Equity Funds	1,878,292,945
International Equity Funds	2,398,987,297
Target Date Fund	457,658,916
Oregon Savings Growth Plan Self Directed	6,185,235
Total Public Equity	27,063,910,456
Real Estate and Real Estate Investment Trusts	8,585,785,027
Private Equity	13,954,350,332
Alternative Equity	2,948,607,060
Opportunity Portfolio	1,364,144,854
Total PERS Investments - Fiduciary Funds	\$ 68,685,307,061

¹Guaranteed Investment Contracts are stated at contract value.

ble activity is limited, yet supports that the NAV represents an exit value of the security at the measurement date, the securities are categorized in level 2. Investments in nongovernmental entities 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 are categorized in level 1. Derivative contract valuations, such as 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 five year period following the termination of the investment period which extends to 2035. Investments in real estate also include 14 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.

Private Equity consists of approximately 230 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 29 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 26 of the 29 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 8 to 12 years. Alternative diversifying strategies permit periodic redemption of shares, subject to certain requirements being met, and consist of two 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 7 to 10 years. The remaining five funds are open ended, permitting periodic redemption of shares. Approximately 20 percent of the value of investments of this type are subject to a restriction on exercising certain termination rights. That restriction will expire within 12 months of June 30, 2016.

PERS has the following recurring fair value measurements as of June 30, 2016 (See Table 8 below).

Disclosures regarding redemption and investments valued at the NAV per share (or its equivalent), including Unfunded

Commitments, are presented in Table 9 on the next page.

2. Rate of Return

For the year ended June 30, 2016, the annual money-weighted rate of return on defined benefit pension plan investments, net of defined benefit pension plan investment expenses, was 1.62 percent. 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, 2016, there were no organizations that represent 5 percent or more of the pension plan's fiduciary net position, or total investments.

TABLE 8

Investments and Derivative Instruments Measured at Fair Value		Fair Value Measurements Using			
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
	6/30/2016				
Investments by Fair Value Level					
Debt Securities					
US Treasury Obligations	\$ 5,951,947,963	\$ —	\$ 5,951,947,963	\$ —	
US Treasury Obligations - Strips	34,980,235	—	34,980,235	—	
US Treasury Obligations - TIPS	164,041,060	—	164,041,060	—	
US Federal Agency Mortgage Securities	844,720,460	—	844,720,460	—	
US Federal Agency Mortgage TBAs	396,477,755	—	396,477,755	—	
US Federal Agency Debt	15,924,372	—	15,924,372	—	
US Federal Agency Strips	45,489,284	—	45,489,284	—	
Non-Government Debt Securities	102,097,212	—	102,097,212	—	
Corporate Bonds	2,641,665,108	—	2,616,946,505	24,718,603	
Bank Loans	2,198,755,922	—	2,034,066,052	164,689,870	
Municipal Bonds	38,716,191	—	38,716,191	—	
Collateralized Mortgage Obligations	833,927,501	—	828,532,355	5,395,146	
Asset-Backed Securities	667,914,450	—	661,501,989	6,412,461	
Domestic Fixed Income Funds	610,304,712	—	598,312,212	11,992,500	
International Fixed Income Funds	50,281,380	—	50,281,380	—	
Total Debt Securities ¹	14,597,243,605	—	14,384,035,025	213,208,580	
Public Equity					
Domestic Equity Securities	10,493,097,436	10,450,449,389	1	42,648,046	
International Equity Securities	9,150,695,658	9,107,639,473	3,146,019	39,910,166	
Domestic Equity Funds	2,665,179,334	103,705,486	2,561,473,848	—	
International Equity Funds	2,398,987,297	932,827,267	1,448,774,623	17,385,407	
Target Date Fund	457,658,916	—	457,658,916	—	
Global Equity Funds	1,878,292,945	89,907,554	1,788,385,391	—	
Oregon Savings Growth Plan - Self Directed	6,185,235	6,185,235	—	—	
Total Public Equity	27,050,096,821	20,690,714,404	6,259,438,798	99,943,619	
Real Estate Investment Trusts	2,484,026,082	2,269,221,019	214,805,056	7	
Private Equity	434,419,940	—	—	434,419,940	
Alternative Real Assets	10,249,810	—	—	10,249,810	
Total Investments by Fair Value Level	\$ 44,576,036,258	\$ 22,959,935,423	\$ 20,858,278,879	\$ 757,821,956	

TABLE 8 continues on the next page

Oregon Public Employees Retirement System

TABLE 8 continuing from the previous page

Investments Measured at the Net Asset Value (NAV)

Real Estate	\$ 6,101,758,945
Private Equity	13,519,930,392
Alternative Equity	
Alternative Real Assets	1,616,981,888
Alternative Diversifying Strategies	1,321,375,362
Total Alternative Equity	2,938,357,250
Opportunity Portfolio	
Opportunity Private Investments	491,212,962
Opportunity Open Ended Funds	872,931,892
Total Opportunity Portfolio	1,364,144,854
Total Investments Measured at the NAV	23,924,191,441
Total Investments Measured at Fair Value	\$ 68,500,227,699

Investments Derivative Instruments

Credit Default Swaps	\$ 323,039	\$ —	\$ 323,039	\$ —
Foreign Exchange Forwards	54,157,062	—	54,157,062	—
Interest Rate Swaps	5,342,500	—	5,342,500	—
Options	2,438,383	—	2,438,383	—
Rights and Warrants	5,155,296	1,449,484	776,481	2,929,331
Total Return Swaps	554,417	—	554,417	—
Total Assets	67,970,697	1,449,484	63,591,882	2,929,331
Credit Default Swaps	(3,051,889)	—	(3,051,889)	—
Foreign Exchange Forwards	(26,801,491)	—	(26,801,491)	—
Interest Rate Swaps	(22,750,260)	—	(22,750,260)	—
Options	(3,857,326)	—	(3,857,326)	—
Total Return Swaps	(394,649)	—	(394,649)	—
Total Liabilities	(56,855,615)	—	(56,855,615)	—
Total Investments Derivative Instruments	\$ 11,115,082	\$ 1,449,484	\$ 6,736,267	\$ 2,929,331

Invested Securities Lending Collateral

Asset-Backed Securities	\$ 182,730,523	\$ —	\$ 182,730,523	\$ —
Certificates of Deposit	140,016,704	—	140,016,704	—
Commercial Paper	144,273,191	—	144,273,191	—
Corporate Bonds	165,154,457	—	165,154,457	—
Repurchase Agreements	702,000,000	—	702,000,000	—
U.S. Government & Agencies	114,004,319	—	114,004,319	—
Total Invested Securities Lending Collateral²	\$ 1,448,179,194	\$ —	\$ 1,448,179,194	\$ —

¹Guaranteed Investment Contracts are excluded from the table as these are stated at contracted value.

²For OSTF's participation in securities lending activity, refer to their audited financial statements at <http://sos.oregon.gov/audits/Documents/2016-19.pdf>.

TABLE 9

Investments Measured at the Net Asset Value

	Fair Value	Unfunded Commitments*	Redemption Frequency (If Currency Eligible)	Redemption Notice Period
Real Estate	\$ 6,101,758,945	\$ 2,603,056,651	N/A	N/A
Private Equity	13,519,930,392	7,146,528,461	N/A	N/A
Alternative Equity				
Alternative Real Assets	1,616,981,888	2,561,209,765	N/A	N/A
Alternative Diversifying Strategies	1,321,375,362	—	Monthly	30 - 75 days
Opportunity Portfolio				
Opportunity Private Investments	491,212,962	376,627,790	N/A	N/A
Opportunity Open Ended Funds	872,931,892	291,643,392	Monthly/Quarterly	5 - 90 days
Total	\$ 23,924,191,441	\$ 12,979,066,059		

* Excludes unfunded commitments associated with investments included in the fair value hierarchy (Levels 1, 2, and 3) and new commitments not yet funded at 6/30/2016.

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, 2016, the fair value of below grade investments, excluding unrated securities, is \$2,972.9 million, or 35.5 percent, of total securities subject to credit risk and 20.1 percent of total debt securities. The weighted quality rating average is A. Unrated securities include \$342.0 million in bank loans, \$831.9 million in mutual funds and guaranteed investment contracts, and \$258.2 million in other debt securities. Table 10 on the next page details the quality ratings for credit risk debt securities as of June 30, 2016.

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, 2016, 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, 2016, there were no single issuer debt investments that exceeded the above guidelines nor were there investments in any one issuer that represent 5 percent or more of total investments or total net position.

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, 2016, the weighted average duration of PERS' fixed income portfolio was 5.27 years.

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, 2016. Table 11 on the next page shows the investments by type, amount, and effective weighted duration.

At June 30, 2016, PERS held approximately \$1,673.0 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 \$396.5 million in To-Be-Announced (TBA) federal agency-issued mortgage pools. An additional \$473.9 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

Oregon Public Employees Retirement System

TABLE 10

<u>Schedule of Credit Risk at June 30, 2016</u>		
Quality Rating		Fair Value
AAA	\$	770,573,774
AA		163,935,729
A		588,060,113
BBB		1,410,078,267
BB		714,595,531
B		1,684,165,609
CCC		551,602,321
CC		6,767,485
D		15,745,869
Not Rated		1,432,050,156
Not Rated ¹		1,029,691,521
Total Subject to Credit Risk		8,367,266,375
U.S. Government Guaranteed Securities		6,401,242,957
Total Debt Securities	\$	<u>14,768,509,332</u>

¹ Federal Agency securities, which are not rated by the credit rating agencies as they carry an implicit guarantee of the US Government.

TABLE 11

<u>Schedule of Interest Rate Risk - Effective Duration at June 30, 2016</u>		
Investments	Fair Value	Effective Weighted Duration Rate (in years)
US Treasury Obligations	\$ 5,951,947,963	6.78
US Treasury Obligations - Strips	34,980,235	0.23
US Treasury Obligations - TIPS	164,041,060	7.57
US Federal Agency Mortgage Securities	844,720,460	2.47
US Federal Agency Mortgage TBAs	396,477,755	2.71
US Federal Agency Debt	15,924,372	7.93
US Federal Agency Strips	45,489,284	2.45
International Debt Securities	649,094,039	3.44
Non-US Government Debt Securities	52,310,810	9.93
Corporate Bonds	2,151,402,993	6.07
Municipal Bonds	38,716,191	10.42
Collateralized Mortgage Obligations	828,250,169	1.69
Asset-Backed Securities	473,850,591	1.57
Mutual Funds - Domestic Fixed Income	610,304,712	2.28
Mutual Funds - International Fixed Income	50,281,380	3.49
No Effective Duration:		
International Debt Securities	283,007,643	N/A
Non-US Government Debt Securities	49,786,402	N/A
Corporate Bonds	19,961,566	N/A
Bank Loans	1,936,695,980	N/A
Guatanteed Investment Contracts	171,265,727	N/A
Total Debt Securities	14,768,509,332	
Cash Equivalent - Mutual Funds - STIF	1,242,946,468	24 Days ¹
Cash Equivalent - Oregon Short Term Funds	1,214,426,375	154 Days ¹
Total Subject to Interest Rate Risk	\$ <u>17,225,882,175</u>	

¹Weighted average maturity

percent of the fixed income manager positions may be invested in non-dollar denominated securities. Policies for the non-fixed portion of PERS' portfolio are silent regarding this risk. As of June 30, 2016, approximately 0.6 percent of the debt investment portfolio was invested in non-dollar denominated securities. See Table 12 below.

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, 2016, the OPERF had \$9,838.5 million in commitments to purchase private equity investments, which includes \$3,117.1 million in callable distributions, \$2,935.9 million in commitments to purchase real estate investments, \$2,597.0 million in commitments to purchase alternative equity investments, which includes \$143.7

million in callable distributions and \$668.3 million in commitments to purchase opportunity portfolio investments, which includes \$140.9 million in callable 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.

TABLE 12

Currency Exposures by Asset Class in US Dollar Equivalents as of June 30, 2016							
Currency	Cash and Cash Equivalents	Debt Securities	Public Equity	Derivatives in Asset Positions	Real Estate	Private Equity	Total
Argentine peso	\$ 22,331	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 22,331
Australian dollar	2,669,461	2,248,055	299,842,268	1,972,364	74,728,345	—	381,460,493
Bolivar fuerte	43	—	1	—	—	—	44
Brazilian real	1,099,867	8,459,395	166,512,430	—	1,335,764	—	177,407,456
Canadian dollar	4,364,680	457,765	442,993,139	—	38,704,903	—	486,520,487
Chilean peso	7,552	—	5,765,855	—	—	—	5,773,407
Chinese yuan	1,361,970	5,172,346	29,584,136	—	—	—	36,118,452
Colombian peso	—	—	2,362,864	—	—	—	2,362,864
Czech koruna	76	—	7,880,860	—	—	—	7,880,936
Danish krone	412,731	3,088	106,869,190	—	—	—	107,285,009
Egyptian pound	345,405	—	15,013,134	—	—	—	15,358,539
Euro	20,359,335	39,240,279	1,691,300,299	372,593	98,024,915	246,409,056	2,095,706,477
Hong Kong dollar	5,125,424	—	490,626,680	554,742	99,019,979	—	595,326,825
Hungarian forint	776,658	—	15,730,182	—	—	—	16,506,840
Indian rupee	639,636	—	142,508,898	—	—	—	143,148,534
Indonesian rupiah	116,559	—	36,303,717	—	—	—	36,420,276
Israeli shekel	116,888	—	20,921,767	—	14,945	—	21,053,600
Japanese yen	11,079,732	8,386,320	1,422,055,855	—	125,294,342	—	1,566,816,249
Kenya shilling	—	—	5,094,072	—	—	—	5,094,072
Malaysian ringgit	74,702	—	29,397,788	790	—	—	29,473,280
Mexican peso	1,017,346	13,888,869	82,174,128	—	8,241,707	—	105,322,050
Moroccan dirham	—	—	1,511,230	—	—	—	1,511,230
New Zealand dollar	257,350	—	13,055,691	—	—	—	13,313,041
Nigerian naira	239,475	—	4,921,844	—	—	—	5,161,319
Norwegian krone	124,124	—	39,176,790	2,493,240	4,078,297	—	45,872,451
Pakistani rupee	758	—	7,319,001	—	—	—	7,319,759
Peruvian nuevo sol	—	—	721,115	—	—	—	721,115
Philippine peso	18,676	—	29,660,050	—	—	—	29,678,726
Polish zloty	119,653	—	13,087,522	—	—	—	13,207,175
Pound sterling	16,365,836	7,005,891	1,832,009,816	3,348,662	65,858,624	—	1,924,588,829
Qatar riyal	—	—	888,221	—	—	—	888,221
Singapore dollar	521,090	—	52,969,537	103,665	16,399,200	—	69,993,492
South African rand	1,650,357	—	167,436,950	—	—	—	169,087,307
South Korean won	414,463	—	385,493,784	334	880,323	—	386,788,904
Swedish krona	391,586	—	192,294,166	—	9,595,955	—	202,281,707
Swiss franc	439,518	—	441,114,052	—	7,597,333	—	449,150,903
Taiwan dollar	444,786	—	231,650,550	—	—	—	232,095,336
Thai baht	411,089	—	74,560,561	—	—	—	74,971,650
Tunisia dinar	—	—	1,216,048	10	—	—	1,216,058
Turkish lira	219,725	—	67,384,168	—	1,666,538	—	69,270,431
United Arab Emirates dirham	29,010	—	16,469,876	—	—	—	16,498,886
Total Subject to Foreign Currency Risk	\$ 71,237,892	\$ 84,862,008	\$ 8,585,878,235	\$ 8,846,400	\$ 551,441,170	\$ 246,409,056	\$ 9,548,674,761

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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, 2016. Previous 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, 2016, is effectively one day. On June 30, 2016, OPERF had no credit risk exposure to borrowers because the amounts OPERF owes borrowers exceeds the amounts borrowers owe OPERF.

On June 30, 2016, the fair value of cash collateral received and invested cash collateral were \$1,495.4 million and \$1,492.4 million, respectively. The cumulative unrealized loss in invested cash collateral of \$3.1 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, 2016, total income from securities lending activity was \$18.3 million, and total expenses for the period were \$6.0 million for a net gain of \$12.3 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, 2016, OPERF’s allocated portion of cash collateral received and invested cash collateral were \$7.8 million and \$7.8 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: <http://sos.oregon.gov/audits/Documents/2016-19.pdf>.

Table 13 on the next page 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, 2016, is shown in Table 14 on the next page. Securities lending collateral subject to interest rate risk as of June 30, 2016, 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 28 and 29. Changes in fair value during the fiscal year are reported in the Net Appreciation in Fair Value of Investments line of the Statements of Changes in Fiduciary Net Position – Pension and Other Postemployment Plans on pages 30 and 31.

TABLE 13

<u>Securities Lending as of June 30, 2016</u>			
Investment Type	Securities on Loan at Fair Value	Cash and Securities Collateral Received	Investments of Cash Collateral at Fair Value
U.S. Treasury Securities	\$ 441,620,756	\$ 450,837,660	\$ 66,752,957
U.S. Agency Securities	4,583,643	4,661,028	—
Domestic Equity Securities	1,254,832,258	1,271,565,791	1,012,899,222
Domestic Debt Securities	142,138,470	144,992,973	92,759,986
International Equity Securities	872,946,019	911,856,708	314,853,804
International Debt Securities	5,037,649	5,125,723	5,115,210
Allocation from Oregon Short Term Fund	10,584,123	10,802,895	7,806,958
Total	\$ 2,731,742,918	\$ 2,799,842,778	\$ 1,500,188,137

TABLE 14

<u>Securities Lending Invested Cash Collateral Subject to Credit Risk as of June 30, 2016</u>	
Quality Rating	Fair Value
AAA	\$ 270,398,315
AA ¹	444,518,618
A	141,039,030
B	3,223,231
Total Subject to Credit Risk	859,179,194
U.S. Government Guaranteed Repurchase Agreements	589,000,000
Allocation from Oregon Short Term Fund	7,806,958
Cash and Receivables	44,201,985
Total Securities Lending Invested Cash Collateral	\$ 1,500,188,137

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

TABLE 15

<u>Securities Lending Invested Cash Collateral Subject to Interest Rate Risk as of June 30, 2016</u>		
Security Type	Fair Value	Effective Weighted Duration Rate (in days)¹
Asset-Backed Securities	\$ 182,730,523	13
Certificates of Deposit	140,016,704	96
Commercial Paper	144,273,191	124
Corporate Bonds	165,154,457	43
Repurchase Agreements	113,000,000	1
U.S. Government & Agencies	114,004,319	17
Total Subject to Interest Rate Risk	859,179,194	50
U.S. Government Guaranteed Repurchase Agreements	589,000,000	
Allocation from Oregon Short Term Fund	7,806,958	
Cash and Receivables	44,201,985	
Total Securities Lending Invested Cash Collateral	\$ 1,500,188,137	

¹ Weighted average days to maturity or next reset date.

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TABLE 16

<u>Derivative Instruments as of June 30, 2016</u>				
Investment Derivatives	Net Appreciation/ (Depreciation) in Fair Value of Investments ^{1,4}	Classification	Fair Value ²	Notional Value ³
Credit Default Swaps Bought	\$ (2,185,109)	Public Equity	\$ (2,252,321)	\$ 205,475,000
Credit Default Swaps Written	(961,313)	Public Equity	(476,529)	60,139,000
Fixed Income Futures Long	73,743,208	Public Equity	—	1,902,050,000
Fixed Income Futures Short	(45,839,382)	Public Equity	—	(398,812,585)
Fixed Income Options Bought	(499,071)	Public Equity	2,193,916	14,080,000
Fixed Income Options Written	1,421,773	Public Equity	(3,748,998)	(578,691,220)
Foreign Currency Options Bought	(496,102)	Public Equity	244,467	11,258,000
Foreign Currency Options Written	241,079	Public Equity	—	—
Futures Options Bought	(4,124,693)	Public Equity	—	—
Futures Options Written	3,207,925	Public Equity	(108,328)	(228,000)
Foreign Exchange Forwards	58,996,945	Receivables/Payables	27,355,571	2,247,572,896
Index Futures Long	(15,404,584)	Public Equity	—	7,150,655
Index Futures Short	15,564,655	Public Equity	—	(75,500)
Pay Fixed Interest Rate Swaps	(24,971,777)	Public Equity	(20,383,012)	781,744,787
Receive Fixed Interest Rate Swaps	4,924,318	Public Equity	2,975,252	72,158,200
Rights	(1,310,246)	Public Equity	847,544	18,399,106
Total Return Swaps Bond	(327,598)	Public Equity	(391,947)	9,028,090
Total Return Swaps Equity	675,652	Public Equity	551,715	(12,120,434)
Warrants	(789,646)	Public Equity	4,307,752	9,905,457
Total	\$ 61,866,034		\$ 11,115,082	\$ 4,349,033,452

¹ Negative values (in brackets) refer to losses.

² Negative values refer to liabilities.

³ Notional may be a dollar amount or size of underlying for futures, rights, warrants, and options. Negative values refer to short positions.

⁴ Excludes futures margin payments.

Table 16 above presents the related net appreciation/(depreciation) in fair value amounts and the notional amounts of derivative instruments outstanding as of June 30, 2016.

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 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 below presents a summary of counterparty

credit ratings relating to derivative instruments as of June 30, 2016.

Interest Rate Risk

As of June 30, 2016, OPERF is exposed to interest rate risk on its various swap arrangements and options. Table 18 on the next page presents a segmented time schedule of those instruments, and Table 19, also on the next page, 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 57 presents a summary of derivative instruments subject to foreign currency risk as of June 30, 2016.

TABLE 17

<u>Derivative Instruments Subject to Counterparty Credit Risk as of June 30, 2016</u>				
Counterparty Name	Percentage of Net Exposure	S&P Rating	Fitch Rating	Moody's Rating
Citibank N.A.	39.13%	A	A+	A1
State Street Bank and Trust Company	23.88%	AA-	AA	Aa3
HSBC Bank PLC	11.36%	A	AA-	A1
HSBC Bank USA	5.96%	AA-	AA-	Aa3
BNP Paribas SA	4.24%	A	A+	A1
Royal Bank of Scotland PLC	3.87%	BBB+	BBB+	A3
JP Morgan Chase Bank N.A.	1.74%	A+	AA-	Aa3
Citigroup	1.60%	BBB+	A	Baa1
Bank of Montreal	1.17%	A+	AA-	Aa3
Royal Bank of Canada (UK)	1.03%	AA-	AA	Aa3
Bank of America, N.A.	0.84%	A	A+	A1
Credit Suisse International	0.78%	A	A	A2
Barclays Bank PLC Wholesale	0.75%	A-	A	A2
Standard Chartered Bank	0.72%	A	A+	Aa3
JP Morgan	0.55%	A-	A+	A3
Goldman Sachs International	0.46%	BBB+	A	A3
Morgan Stanley Co. Incorporated	0.44%	BBB+	A	A3
Barclays Bank CME	0.39%	A-	A	A2
Deutsche Bank AG	0.37%	BBB+	A-	Baa2
Morgan Stanley and Co. International PLC	0.32%	BBB+	A	A3
Commonwealth Bank of Australia Sydney	0.20%	AA-	AA-	Aa2
Royal Bank of Canada	0.15%	AA-	AA	Aa3
Morgan Stanley and Co. Incorporated	0.05%	BBB+	A	A3
	<u>100.00%</u>			

TABLE 18

Derivative Instruments Subject to Interest Rate Risk as of June 30, 2016					
Investment Type	Fair Value	Investment Maturities (in years)			
		Less Than 1	1 - 5	6 - 10	More than 10
Credit Default Swaps Bought	\$ (2,252,321)	\$ —	\$ (2,252,321)	\$ —	\$ —
Credit Default Swaps Written	(476,529)	—	260,472	(135,546)	(601,455)
Fixed Income Options Bought	2,193,916	—	2,193,916	—	—
Fixed Income Options Written	(3,748,998)	(19,501)	(3,729,497)	—	—
Pay Fixed Interest Rate Swaps	(20,383,012)	(282,404)	(3,440,453)	(13,735,020)	(2,925,135)
Receive Fixed Interest Rate Swaps	2,975,252	—	780,292	2,194,960	—
Total Return Swaps Bond	(391,947)	(391,947)	—	—	—
Total Return Swaps Equity	551,715	551,715	—	—	—
Total	\$ (21,531,924)	\$ (142,137)	\$ (6,187,591)	\$ (11,675,606)	\$ (3,526,590)

TABLE 19

Derivative Instruments Highly Sensitive to Interest Rate Changes as of June 30, 2016			
Investment Type	Reference Rate	Fair Value	Notional Value
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.0425%	\$ (1,347,652)	\$ 24,730,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.8885%	(1,754,723)	14,340,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.817%	(1,236,258)	10,200,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.247%	(368,212)	6,020,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month Australian BBSW, Pay Fixed 2.14%	(109,099)	64,653,616
Pay Fixed Interest Rate Swaps	Receive Variable 3-month Australian BBSW, Pay Fixed 2.2%	(173,305)	56,783,194
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.488%	(449,065)	4,520,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.72%	(2,925,135)	15,840,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.897%	(2,475,038)	52,000,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month Australian BBSW, Pay Fixed 1.915%	50,637	42,337,955
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.259%	(1,374,320)	16,480,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.9%	(4,469,715)	93,124,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.63375%	(222,355)	9,095,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month Australian BBSW, Pay Fixed 2.2125%	(363,267)	48,555,364
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Norwegian NIBOR, Pay Fixed 0.95375%	(70,012)	103,077,814
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Norwegian NIBOR, Pay Fixed 1.007%	(53,041)	34,317,844
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.39%	(2,636,558)	151,450,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.58%	(405,894)	24,200,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.46%	—	10,020,000
Subtotal - Pay Fixed Interest Rate Swaps		(20,383,012)	781,744,787
Receive Fixed Interest Rate Swaps	Receive Fixed 2.6275%, Pay Variable 3-month LIBOR	614,936	5,850,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.9725%, Pay Variable 6-month Australian BBSW	663,874	9,828,720
Receive Fixed Interest Rate Swaps	Receive Fixed 3.384%, Pay Variable 6-month Australian BBSW	636,215	6,157,842
Receive Fixed Interest Rate Swaps	Receive Fixed 1.6435%, Pay Variable 6-month GBP LIBOR	560,574	13,270,414
Receive Fixed Interest Rate Swaps	Receive Fixed 1.556%, Pay Variable 6-month Norwegian NIBOR	279,935	12,801,224
Receive Fixed Interest Rate Swaps	Receive Fixed 1.185%, Pay Variable 3-month LIBOR	219,718	24,250,000
Subtotal - Receive Fixed Interest Rate Swaps		2,975,252	72,158,200
Total Interest Rate Swaps		\$ (17,407,760)	\$ 853,902,987

TABLE 20

Derivative Instruments Subject to Foreign Currency Risk as of June 30, 2016					
Currency Name	Currency Forward Contracts		Options/Rights/ Warrants	Swaps	Total Exposure
	Net Receivables	Net Payables			
Australian dollar	\$ 1,171,575	\$ (118,187)	\$ 226,340	\$ 705,055	\$ 1,984,783
Brazilian real	98,516	(1,874,789)	—	—	(1,776,273)
Canadian dollar	50,332	80,374	—	—	130,706
Danish krone	(40,443)	118,888	—	—	78,445
Euro	2,764,726	5,930,379	42,712	—	8,737,817
Hong Kong dollar	(161,731)	(565)	326	551,715	389,745
Hungarian forint	—	51,355	—	—	51,355
Indian rupee	(14,124)	—	—	—	(14,124)
Indonesian rupiah	(1,106)	—	—	—	(1,106)
Japanese yen	11,877,589	(6,230,047)	—	—	5,647,542
Malaysian ringgit	71,046	205,875	790	—	277,711
Mexican peso	293,799	43,662	—	—	337,461
New Israeli sheqel	53,791	(972)	—	—	52,819
New Taiwan dollar	—	(144,091)	—	—	(144,091)
New Zealand dollar	3,062,172	(910,267)	—	—	2,151,905
Norwegian krone	(578,300)	169,618	150,758	156,883	(101,041)
Pound sterling	(8,093,847)	20,877,905	2,929,321	560,574	16,273,953
Singapore dollar	289,436	(130,537)	103,665	—	262,564
South African rand	67,669	(10,122)	—	—	57,547
South Korean won	—	(403,392)	334	—	(403,058)
Swedish krona	(1,839,498)	562,001	—	—	(1,277,497)
Swiss franc	553,265	(593,906)	—	(391,947)	(432,588)
Tunisian dinar	—	—	10	—	10
Yuan renminbi	—	107,522	—	—	107,522
Total Subject to Foreign Currency Risk	9,624,867	17,730,704	3,454,256	1,582,280	32,392,107
U.S. dollar	—	—	282,097	(21,559,122)	(21,277,025)
Total	\$ 9,624,867	\$ 17,730,704	\$ 3,736,353	\$ (19,976,842)	\$ 11,115,082

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 straightline 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.

Note 6 - Long-Term Debt

In 1997 PERS completed construction on its retirement system headquarters building in Tigard, Oregon. The construction was financed by the sale of certificates of participation (COP), Series A. In March 2002, a new COP, Series B, was issued and used to refund the original Series A COP. In April 2012 an XI-Q general obligation bond, 2012 Series K, was issued to refund the 2002 Series B COP. The Series K bond amount outstanding at June 30, 2016, is \$615,000 and has a final repayment due May 1, 2017.

Table 22 on the next page summarizes all future PERS building bond payments of principal and interest for the next fiscal year ending June 30, 2017. The current portion of the PERS building debt is \$615,000.

Table 23 on the next page summarizes the changes in long-term debt for the year ended June 30, 2016.

TABLE 21

<u>Schedule of Capital Assets as of June 30, 2016</u>				
	Beginning of Year	Increases	Decreases	End of Year
Capital Assets				
Furniture and Equipment	\$ 1,554,349	\$ 275,297	\$ (390,337)	\$ 1,439,309
Data Processing Software	40,331,423	40,740	(31,486)	40,340,677
Data Processing Hardware	1,982,885	—	(36,443)	1,946,442
Building and Building Improvements	8,617,633	—	—	8,617,633
Land	944,463	—	—	944,463
Total Capital Assets	53,430,753	316,037	(458,266)	53,288,524
Less Accumulated Depreciation				
Furniture and Equipment	(829,895)	(319,782)	293,894	(855,783)
Data Processing Software	(13,453,608)	(1,883,593)	—	(15,337,201)
Data Processing Hardware	(772,718)	(324,069)	11,106	(1,085,681)
Building and Building Improvements	(3,523,767)	(279,035)	—	(3,802,802)
Total Accumulated Depreciation	(18,579,989)	(2,806,479)	305,000	(21,081,467)
Capital Assets, Net	\$ 34,850,765	\$ (2,490,442)	\$ (153,266)	\$ 32,207,057
<u>Depreciation Expense</u>		<u>Amount</u>		
Defined Benefit Pension Plan Depreciation		\$ 2,784,247		
Oregon Public Service Retirement Plan				
Individual Account Program Depreciation		22,232		
Total Depreciation Expense		\$ 2,806,479		

TABLE 22

<u>PERS Building Debt Service Requirements to Maturity</u>				
Fiscal Year	Series "K" Principal		Interest	Total
2017	\$ 615,000	\$	30,750	\$ 645,750
Total	\$ 615,000	\$	30,750	\$ 645,750

TABLE 23

<u>Long-Term Debt Activity</u>					
	Balance June 30, 2015	Additions	Deductions	Balance June 30, 2016	Amounts Due Within One Year
PERS Building Principal	\$ 1,200,000	\$ –	\$ (585,000)	\$ 615,000	\$ 615,000
Plus: Premium (Net)	115,411	–	(62,951)	52,460	52,460
Total Bonds Payable	\$ 1,315,411	\$ –	\$ (647,951)	\$ 667,460	\$ 667,460

Note 7 - 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 24 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.

TABLE 24

<u>Reserves and Designations</u>	<u>Defined Benefit Pension Plan</u>
Chapter 238 Defined Benefit Plan and Employee Benefit Plan	
Member Reserve	\$ 5,899,822,546
Employer Contribution Designation	28,447,595,589
Benefit Reserve	21,009,947,056
Tier One Rate Guarantee Reserve	448,776,254
Contingency Reserve	558,657,273
Employer Contingency Reserve	25,000,000
Unallocated Earnings Allocation	3,003,112,896
OPSRP Defined Benefit Program	2,689,147,488
Net Position Restricted for Pension Benefits	\$ 62,082,059,102

Oregon Public Employees Retirement System

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.

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, 2016, the balance of this account was \$436.9 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, 2016, the balance of this account was \$15.0 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, 2016, the balance of this account was \$1,557.8 million. The Internal Revenue Code (IRC) limits plan member contributions to an IRC 457 account to a maximum of \$18,000 (for calendar year 2016), with optional catch up provisions available to members over age 50.

Enterprise Fund

M. 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, 2016, the balance of this account was \$47.4 million.

Note 8 - 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 9 - 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). The estimated claims liability was calculated by Butler, Partners, & Associates, PERS' health insurance consultant, at June 30, 2016, using a variety of actuarial and statistical techniques and adjusted for actual experience to produce current estimates that reflect recent settle-

ments, 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 portion represents an estimate for claims that have been incurred prior to June 30, 2016, but have not been reported to the SRHIA. Table 25 below shows the changes in the aggregated estimated claims liabilities as of June 30, 2016 and 2015.

B. Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

The state of Oregon participates in PERS' defined benefits plans, and PERS is an agency of the state. Pursuant to GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*, a balance for a net pension liability has been allocated to the state of Oregon's proprietary funds, including SRHIA. At June 30, 2016, SRHIA reported an liability of \$113,625 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2015, and the total pension liability used to

calculate the net pension liability was determined by an actuarial valuation as of December 31, 2013, rolled forward to June 30, 2015. SRHIA's proportion of the net pension liability was based on a projection of SRHIA's long-term share of contributions to the pension plan relative to the projected contributions of all participating entities, actuarially determined. At June 30, 2016, SRHIA's proportionate share of the statewide pension plan was 0.00777009 percent.

For the year ended June 30, 2016, SRHIA recognized a pension expense of \$107,738. Table 26 on the next page show the amounts SRHIA reported as deferred outflows of resources and deferred inflows of resources related to pensions at June 30, 2016.

The deferred outflows of resources totaling \$20,258 related to pensions resulting from SRHIA's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2016. Table 27 on the next page displays the other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions that will be recognized in pension expense.

TABLE 25

<u>Changes in the Aggregated Estimated Claims Liabilities of SRHIA</u>		
<u>For the Year Ended June 30,</u>		
	<u>2016</u>	<u>2015</u>
Total Estimated Claims at Beginning of Fiscal Year	\$ 14,798,000	\$ 14,492,000
<u>Insured Claims and Claim Adjustment Expenses</u>		
Provision for Insured Events of Current Fiscal Year	179,105,169	208,932,020
Increase/(Decrease) in Provision for Insured Events of Prior Years	(90,551)	3,278,093
Total Incurred Claims and Claim Adjustment Expenses	<u>179,014,618</u>	<u>212,210,113</u>
<u>Payments</u>		
Claims and Claim Adjustment Expenses Attributable to Insured Events of Current Fiscal Year	169,905,169	194,134,020
Claims and Claim Adjustment Expenses Attributable to Insured Events of Prior Fiscal Year	<u>14,707,449</u>	<u>17,770,093</u>
Total Payments	<u>184,612,618</u>	<u>211,904,113</u>
Total Estimated Claims at End of Fiscal Year	\$ <u>9,200,000</u>	\$ <u>14,798,000</u>

TABLE 26

<u>Deferred Outflow of Resources and Deferred Inflow of Resources</u>		
<u>For the Year Ended June 30, 2016</u>		
	<u>Deferred Outflow of Resources</u>	<u>Deferred Inflow of Resources</u>
Differences between expected and actual experience	\$ 6,127	\$ —
Changes in assumptions	—	—
Net difference between projected and actual earnings on investments	—	23,818
Changes in proportion and differences between fund contributions and proportionate share of contributions	2,909	3,847
Contributions subsequent to the measurement date	20,258	—
Total	\$ <u>29,294</u>	\$ <u>27,665</u>

TABLE 27

<u>Deferred Outflow of Resources and Deferred Inflow of Resources</u>	
<u>Will be recognized in Pension Expenses as follows:</u>	
Year ended June 30:	<u>Pension Expense</u>
2017	\$ (10,156)
2018	(10,156)
2019	(10,155)
2020	11,419
2021	419
Thereafter	—
Total	\$ <u>(18,629)</u>

TABLE 28

<u>Net Pension Liability (in Millions)</u>	
<u>As of June 30, 2016</u>	
	<u>2016</u>
Total Pension Liability	\$ 77,094.4
Plan Fiduciary Net Position	62,082.1
Employers' Net Pension Liability	\$ <u>15,012.3</u>
Plan net position as a percentage of total pension liability	80.5 %

Note 10 - 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 28 on the previous page.

The actuarial valuation calculations are based on 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, 2014 Actuarial Valuation was used to develop the GASB 67 financial reporting results for the Defined Benefits programs as of June 30, 2016.

Key actuarial methods and assumptions used to measure the total pension liability are illustrated in Table 29 on page 65.

Discount Rate

The discount rate used to measure the total pension liability was 7.50 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.

Table 30 on page 65 presents the net pension liability calculated using the discount rate of 7.50 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is one percent lower (6.50 percent) or one percent higher (8.50 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 90.

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 66 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 below. 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 independent 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 11 – Postemployment Healthcare Plans

The funded status of each postemployment healthcare plan as of the most recent actuarial valuation date is illustrated in Table 32 on page 66. Actuarial methods and assumptions of each postemployment healthcare plan used in the actuarial valuation dated December 31, 2013, to determine contribution rates for the year ended June 30, 2016, and in the most recent actuarial valuation dated December 31, 2015, are illustrated in Table 33 on page 67.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Actuarially determined amounts are subject to continual revision as actual results are compared to past expectations and new estimates are made about the future. The required schedule of funding progress immediately following the notes to the financial statements presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

Actuarial calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members at that point.

TABLE 29

<u>Actuarial Methods and Assumptions</u>	
	<u>Pension</u>
Valuation date	December 31, 2014
Measurement date	June 30, 2016
Experience Study	2014, published September 2015
Actuarial assumptions:	
Inflation rate	2.50 percent (reduced from 2.75%)
Long-term expected rate of return ¹	7.50 percent (reduced from 7.75%)
Discount rate	7.50 percent (reduced from 7.75%)
Projected salary increases	3.50 percent (reduced from 3.75%)
Cost of living adjustments (COLA)	Blend of 2.00% COLA and graded COLA (1.25%/0.15%) in accordance with <i>Moro</i> decision; blend based on service.
Mortality	<p><i>Healthy retirees and beneficiaries:</i> RP-2000 Sex-distinct, generational per Scale BB, with collar adjustments and set-backs as described in the valuation.</p> <p><i>Active members:</i> Mortality rates are a percentage of healthy retiree rates that vary by group, as described in the valuation.</p> <p><i>Disabled retirees:</i> Mortality rates are a percentage (70% for males, 95% for females) of the RP-2000 Sex-distinct, generational per Scale BB, disabled mortality table.</p>

¹ At its September 25, 2015 meeting, the PERS Board reduced the assumed rate of return on investments from 7.75 percent to 7.50 percent.

TABLE 30

<u>Sensitivity of Net Pension Liability to Changes in the Discount Rate (in Millions)</u>				
<u>As of June 30, 2016</u>				
Employers' Net Pension Liability	1% Decrease (6.50 %)	Current Discount Rate (7.50%)	1% Increase (8.50 %)	
Defined Benefit Pension Plan	\$ 24,239.9	\$ 15,012.3	\$ 7,299.7	

TABLE 31

Asset Class	Target Allocation*	Annual Arithmetic Return	Compound Annual (Geometric) Return	Standard Deviation
Core Fixed Income	8.00 %	4.10 %	4.00 %	4.68 %
Short-Term Bonds	8.00	3.65	3.61	2.74
Bank/Leveraged Loans	3.00	5.69	5.42	7.82
High Yield Bonds	1.00	6.67	6.20	10.28
Large/Mid Cap US Equities	15.75	7.96	6.70	17.07
Small Cap US Equities	1.31	8.93	6.99	21.35
Micro Cap US Equities	1.31	9.37	7.01	23.72
Developed Foreign Equities	13.13	8.34	6.73	19.40
Emerging Market Equities	4.12	10.56	7.25	28.45
Non-US Small Cap Equities	1.88	9.01	7.22	20.55
Private Equity	17.50	11.60	7.97	30.00
Real Estate (Property)	10.00	6.48	5.84	12.00
Real Estate (REITS)	2.50	8.74	6.69	22.02
Hedge Fund of Funds – Diversified	2.50	4.94	4.64	8.09
Hedge Fund – Event-driven	0.63	7.07	6.72	8.90
Timber	1.88	6.60	5.85	13.00
Farmland	1.88	7.11	6.37	13.00
Infrastructure	3.75	8.31	7.13	16.50
Commodities	1.88	6.07	4.58	18.40
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 December 3, 2014. The revised allocation was adopted at the June 3, 2015 OIC meeting.

TABLE 32 (dollar amounts in millions)

Funded Status - OPEB Plans¹						
Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
RHIA						
12/31/2015	\$ 419.3	\$ 465.6	\$ 46.3	90.0 %	\$ 9,544.1	0.5 %
RHIPA						
12/31/2015	11.2	67.8	56.6	16.5	2,831.8	2.0

¹Note: discrepancies with the Actuarial Valuation are due to rounding differences.

TABLE 33

Actuarial Methods and Assumptions - OPEB Plans		
Contribution Rates Valuation	RHIA	RHIPA
Valuation date:	December 31, 2013	
Actuarial cost method:	Entry Age Normal	
Amortization method:	Amortized as a level percentage of payroll; UAL (10 year) amortization is closed.	
Equivalent single amortization period:	3 years	9 years
	The Equivalent Single Amortization Period (ESAP) calculation is performed biennially with each rate-setting actuarial valuation.	
Asset valuation method:	Market value of assets	
Actuarial assumptions:		
Investment rate of return	7.75 percent	
Payroll growth	3.75 percent	
Consumer price inflation	2.75 percent	
Health cost inflation	None. Statute stipulates \$60 monthly payment for healthcare insurance.	Graded from 6.1 percent in 2014 to 4.7 percent in 2083.
Annual Valuation	RHIA	RHIPA
Valuation date:	December 31, 2015	
Actuarial cost method:	Entry Age Normal	
Amortization method:	Amortized as a level percentage of payroll; UAL (10 year) amortization is closed.	
Equivalent single amortization period:	1 years	7 years
	The Equivalent Single Amortization Period (ESAP) calculation is performed biennially with each rate-setting actuarial valuation.	
Asset valuation method:	Market value of assets	
Actuarial assumptions:		
Investment rate of return	7.50 percent	
Payroll growth	3.50 percent	
Consumer price inflation	2.50 percent	
Health cost inflation	None. Statute stipulates \$60 monthly payment for healthcare insurance.	Graded from 6.3 percent in 2016 to 4.4 percent in 2094.

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

(amounts in millions)

	2016	2015	2014
Total Pension Liability²			
Service Cost	\$ 1,016.8	\$ 960.9	\$ 1,020.3
Interest on Total Pension Liability	5,355.3	4,779.5	4,819.4
Changes in Benefit Terms	—	5,353.5	(2,423.6)
Changes in Assumptions	3,946.4	—	—
Differences Between Expected and Actual Experience	317.3	380.0	—
Benefit Payments	(4,206.5)	(3,943.6)	(3,863.4)
Net Change in Total Pension Liability	6,429.3	7,530.3	(447.3)
Total Pension Liability - Beginning	70,665.1	63,134.8	63,582.1
Total Pension Liability - Ending	<u>\$ 77,094.4</u>	<u>\$ 70,665.1</u>	<u>\$ 63,134.8</u>
Plan Fiduciary Net Position			
Employer Contributions	\$ 977.3	\$ 1,123.3	\$ 915.2
Member Contributions	14.2	13.8	15.3
Net Investment and Other Income	413.9	2,364.5	9,886.6
Benefit Payments	(4,193.3)	(3,927.2)	(3,837.8)
Refunds of Member Accounts	(13.1)	(16.5)	(25.6)
Administrative Expense	(40.5)	(35.7)	(31.2)
Net Change in Plan Fiduciary Net Position	(2,841.5)	(477.8)	6,922.5
Plan Fiduciary Net Position - Beginning	64,923.6	65,401.4	58,478.9
Plan Fiduciary Net Position - Ending	<u>\$ 62,082.1</u>	<u>\$ 64,923.6</u>	<u>\$ 65,401.4</u>
Net Pension Liability/(Asset)	15,012.3	5,741.5	(2,266.6)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	80.5 %	91.9 %	103.6 %
Covered Payroll	9,428.4	9,000.2	8,701.7
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	159.2 %	63.8 %	(26.0) %

¹ 10-year trend information will be disclosed prospectively² See Table 29 for Actuarial Methods and Assumptions**Changes in Benefit Terms and Assumptions:**

Benefit Terms: 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. The changes include the lowering of the long-term expected rate of return to 7.50 percent and lowering of the assumed inflation to 2.50 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 Year Ended June 30¹**

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

¹ 10-year trend information will be disclosed prospectively

Oregon Public Employees Retirement System

Required Supplementary Information

Schedule of Defined Benefit Pension Plan Employer Contributions³ (Unaudited)

Last 10 Fiscal Years

(Dollar amounts in thousands)

	2016	2015	2014	2013
Actuarially determined contributions ¹	\$ 941,321	\$ 909,912	\$ 866,635	\$ 781,015
Contributions in relation to the actuarially determined contributions ²	941,321	909,912	866,635	781,015
Contribution deficiency (excess)	\$ —	\$ —	\$ —	\$ —
Covered payroll	\$ 9,428,447	\$ 9,000,246	\$ 8,701,657	\$ 8,280,731
Contributions as a percentage of covered payroll	9.98%	10.11%	9.96%	9.43%

Notes:

¹ The actuarially determined contributions on this Schedule of Defined Benefit Pension Plan Contributions have been adjusted to remove amounts contributed to finance employer-specific liabilities and employer optional supplemental contributions.

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

2012	2011	2010	2009	2008	2007
\$ 774,461	\$ 361,655	\$ 377,778	\$ 592,546	\$ 552,242	\$ 540,796
774,461	361,655	377,778	592,546	552,242	540,796
\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
\$ 8,650,799	\$ 8,618,636	\$ 8,451,349	\$ 8,281,261	\$ 7,733,970	\$ 7,325,161
8.95%	4.20%	4.47%	7.16%	7.14%	7.38%

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

Oregon Public Employees Retirement System

Required Supplementary Information
Schedules of Funding Progress (Unaudited)
OPEB Plans
(dollar amounts in millions)¹

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)		Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
<u>Postemployment Healthcare Benefits – Retirement Health Insurance Account</u>							
12/31/2006	\$ 221.3	\$ 511.8	\$ 290.5	43.2 %	\$	7,326.8	4.0 %
12/31/2007	250.8	499.6	248.8	50.2		7,721.8	3.2
12/31/2008	183.8	494.0	310.2	37.2		8,130.1	3.8
12/31/2009	214.1	511.2	297.1	41.9		8,512.2	3.5
12/31/2010	232.3	547.1	314.8	42.5		8,750.1	3.6
12/31/2011	239.6	461.1	221.5	52.0		8,550.5	2.6
12/31/2012	291.6	471.8	180.2	61.8		8,590.9	2.1
12/31/2013	353.5	473.6	120.1	74.7		8,671.8	1.4
12/31/2014	395.9	468.4	72.5	84.5		9,115.8	0.8
12/31/2015	419.3	465.6	46.3	90.0		9,544.1	0.5
<u>Postemployment Healthcare Benefits – Retiree Health Insurance Premium Account</u>							
12/31/2006	\$ 7.0	\$ 23.4	\$ 16.4	30.0 %	\$	1,946.8	0.8 %
12/31/2007	7.8	23.3	15.5	33.6		2,080.2	0.7
12/31/2008	5.7	21.3	15.6	26.7		2,217.9	0.7
12/31/2009	6.4	24.5	18.2	25.9		2,371.8	0.8
12/31/2010	5.7	33.9	28.2	16.8		2,379.7	1.2
12/31/2011	4.5	34.4	29.9	13.2		2,376.9	1.3
12/31/2012	4.4	60.3	55.9	7.4		2,432.4	2.3
12/31/2013	5.2	61.2	56.0	8.6		2,531.5	2.2
12/31/2014	7.2	70.5	63.3	10.2		2,718.9	2.3
12/31/2015	11.2	67.8	56.6	16.5		2,831.8	2.0

Notes:

¹ Discrepancies contained in this table are the result of rounding differences.

Required Supplementary Information
Schedules of Employer Contributions (Unaudited)
OPEB Plans
(dollar amounts in millions)

Actuarial Valuation Date	Annual Required Contribution	Percentage Contributed
<u>Postemployment Healthcare Plan - Retiree Health Insurance Account¹</u>		
12/31/2010	\$ 26.5	83 %
12/31/2011	37.0	88
12/31/2012	47.5	101
12/31/2013	47.1	101
12/31/2014	49.0	101
12/31/2015	48.7	100
<u>Postemployment Healthcare Plan - Retiree Health Insurance Premium Account²</u>		
12/31/2010	\$ 2.3	64 %
12/31/2011	2.8	83
12/31/2012	3.4	101
12/31/2013	4.5	104
12/31/2014	6.3	101
12/31/2015	8.8	99

¹ The Retirement Health Insurance Account provides postemployment healthcare benefits for eligible members for all participating employers.

² The Retiree Health Insurance Premium Account provides postemployment healthcare benefits only for eligible members who retired from state of Oregon employers.

Oregon Public Employees Retirement System

Required Supplementary Information

Schedule of Claims Development Information (Unaudited)

Standard Retiree Health Insurance Account

Fiscal and Policy Year Ended (In Millions)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
1. Net earned required contribution and investment revenues	\$ 174.19	\$ 188.99	\$ 195.59	\$ 198.85	\$ 226.61	\$ 197.92
2. Unallocated expenses	20.01	22.15	25.00	29.00	32.09	26.30
3. Estimated incurred claims and expense, end of policy year	152.55	150.62	172.89	175.41	212.21	179.01
4. Paid (cumulative) as of:						
End of policy year	150.42	160.15	172.76	175.01	211.90	184.61
One year later	161.43	171.80	185.22	192.78	226.61	
Two years later	161.34	171.68	185.21	192.81		
Three years later	161.27	171.66	185.20			
Four years later	161.25	171.66				
Five years later	161.27					
Six years later						
Seven years later						
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
One year later	163.56	162.27	185.35	193.18	226.92	
Two years later	163.47	162.20	185.34	193.21		
Three years later	163.35	162.17	185.33			
Four years later	163.34	162.17				
Five years later	163.35					
Six years later						
Seven years later						
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	14.77	—

Oregon Public Employees Retirement System

Other Supplementary Information Schedule of Fiduciary Plan Net Position Defined Benefit Pension Plan As of June 30, 2016

	Oregon Public Service Retirement Plan			
	Regular Account	Pension Program	Variable Account	Total
Assets:				
Cash and Cash Equivalents	\$ 2,236,272,214	\$ 148,131,516	\$ 2,522,585	\$ 2,386,926,315
Receivables:				
Employer	54,639,747	265,133	–	54,904,880
Interest and Dividends	263,839,230	11,858,377	–	275,697,607
Investment Sales and Other Receivables	945,048,992	39,817,730	6,000,000	990,866,722
Transitional Liability	555,342,138	–	–	555,342,138
Total Receivables	1,818,870,107	51,941,240	6,000,000	1,876,811,347
Interaccount Receivables and Payables	(8,077,771)	6,973,138	1,104,633	–
Due from Other Funds	1,178,813	–	–	1,178,813
Investments:				
Debt Securities	12,331,261,633	554,234,292	–	12,885,495,925
Public Equity	21,482,358,036	965,534,578	589,274,146	23,037,166,760
Real Estate	7,303,596,030	328,263,522	–	7,631,859,552
Private Equity	11,870,427,384	533,521,882	–	12,403,949,266
Alternative Equity	2,508,266,251	112,735,194	–	2,621,001,445
Opportunity Portfolio	1,160,425,391	52,155,859	–	1,212,581,250
Total Investments	56,656,334,725	2,546,445,327	589,274,146	59,792,054,198
Securities Lending Cash Collateral	1,275,241,459	57,518,097	12,870	1,332,772,426
Prepaid Expenses	5,527,082	197,864	–	5,724,946
Capital Assets at Cost, Net	29,579,596	2,338,440	–	31,918,036
Total Assets	62,014,926,225	2,813,545,622	598,914,234	65,427,386,081
Liabilities:				
Investment Purchases and Accrued Expenses	1,834,556,238	66,427,644	3,673,713	1,904,657,595
Deposits and Other Liabilities	96,913,527	335,124	19,874	97,268,525
Due to Other Funds	7,234,586	–	–	7,234,586
Bonds Payable	667,460	–	–	667,460
Securities Lending Cash Collateral Due Borrowers	1,277,850,578	57,635,365	12,870	1,335,498,813
Total Liabilities	3,217,222,389	124,398,133	3,706,457	3,345,326,979
Net Position Restricted for Pension Benefits	\$ 58,797,703,836	\$ 2,689,147,489	\$ 595,207,777	\$ 62,082,059,102

Oregon Public Employees Retirement System

Other Supplementary Information

Schedule of Changes in Fiduciary Plan Net Position

Defined Benefit Pension Plan

For the Year Ended June 30, 2016

	Oregon Public Service Retirement Plan			
	Regular Account	Pension Program	Variable Account	Total
Additions:				
Contributions:				
Employer	\$ 563,660,720	\$ 413,671,609	\$ —	\$ 977,332,329
Plan Member	14,042,013	—	172,328	14,214,341
Total Contributions	577,702,733	413,671,609	172,328	991,546,670
Investment Income:				
Net Appreciation (Depreciation) in Fair Value of Investments	(489,876,200)	(2,331,789)	(26,601,813)	(518,809,802)
Interest, Dividends and Other Investment Income	1,341,967,398	64,679,013	97,267	1,406,743,678
Total Investment Income	852,091,198	62,347,224	(26,504,546)	887,933,876
Less Investment Expense	465,812,065	22,047,305	440,290	488,299,660
Net Investment Income	386,279,133	40,299,919	(26,944,836)	399,634,216
Securities Lending Income:				
Securities Lending Income	15,684,874	626,927	52	16,311,853
Less Securities Lending Expense	(5,162,179)	(213,480)	(52)	(5,375,711)
Net Securities Lending Income	10,522,695	413,447	—	10,936,142
Other Income	2,328,254	1,189	1,016,052	3,345,495
Total Additions	976,832,815	454,386,164	(25,756,456)	1,405,462,523
Deductions				
Benefits	4,131,660,628	15,589,073	36,132,865	4,183,382,566
Death Benefits	9,925,146	—	—	9,925,146
Refunds of Contributions	12,809,120	—	345,458	13,154,578
Administrative Expense	33,453,060	5,792,953	1,321,212	40,567,225
Interaccount Transfers	(66,497,197)	—	66,497,197	—
Total Deductions	4,121,350,757	21,382,026	104,296,732	4,247,029,515
Net Increase/(Decrease)	(3,144,517,942)	433,004,138	(130,053,188)	(2,841,566,992)
Net Position Restricted for Pension Benefits				
Beginning of Year	61,942,221,778	2,256,143,351	725,260,965	64,923,626,094
End of Year	\$ 58,797,703,836	\$ 2,689,147,489	\$ 595,207,777	\$ 62,082,059,102

Other Supplemental Information
Schedule of Administrative Expenses - All Funds
For the Year Ended June 30, 2016

Personal Services:

Staff Salaries	\$ 20,185,978
Retirement	4,411,992
Social Security	1,519,784
Unemployment Compensation	16,512
Worker Compensation	10,857
Insurance	5,289,414
Assessments	128,823
Total Personal Services	<u>31,563,360</u>

Professional Services:

Actuarial	499,484
Data Processing	15,324
Audit	515,905
Legal Counsel	426,268
Medical Consultants	131,188
Training and Recruitment	344,843
Contract Services	6,558,787
Healthcare Fees	26,268,671
Total Professional Services	<u>34,760,470</u>

Communications:

Printing	53,236
Telephone	153,191
Postage	720,610
Travel	158,397
Total Communication	<u>1,085,434</u>

Rentals:

Office Space	535,684
Equipment	7,031
Total Rentals	<u>542,715</u>

Miscellaneous:

Central Government Charges	5,043,285
Supplies	1,736,122
Maintenance	334,786
Non-Capitalized Equipment	182,777
Depreciation	2,806,479
COP and Bond Amortization	10,018
Total Miscellaneous	<u>10,113,467</u>

Total Administrative Expenses	\$ <u><u>78,065,446</u></u>
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Oregon Public Employees Retirement System**Other Supplemental Information****Schedule of Payments to Consultants and Contractors****For the Year Ended June 30, 2016**

Individual or Firm	Commission/Fees	Nature of Service
Milliman Inc	\$ 499,484	Actuarial
Macias Gini & O'Connell LLP	541,021	Audit
Oregon Audits Division	4,114	Audit
CEM Benchmarking	45,000	Benchmarking
BenefitHelp Solutions	3,791,982	Health Insurance
Butler Partners & Associates LLC	83,038	Health Insurance
Moda Health	22,466,371	Health Insurance
Voya	2,261,191	IAP Administration
Arnerich Massena & Associates Inc	17,934	Investment Firm
Department Of Justice	277,966	Legal
Ice Miller LLP	12,903	Legal
State Of Oregon Secretary Of State	375	Legal
Cascade Centers Inc	9,211	Medical
Fred William Miller MD	37,450	Medical
Oregon Medical Evaluations Inc	1,500	Medical
Ronald N Turco MD	7,800	Medical
Heat Software USA Inc	50,750	Technology
HP Enterprise Services	1,064	Technology
LexisNexis Risk Data Management Inc	5,955	Technology
MMC Systems Inc	2,415,610	Technology
Oregon State Treasury	18,290	Technology
Proposal Technologies Network Inc	10,700	Technology
Right System Inc	179,500	Technology
State Of Oregon Secretary Of State	4,114	Technology
U Work Com Inc	14,168	Technology
Oregon Department of Human Services	38,374	Vital Records

Oregon Public Employees Retirement System

Other Supplementary Information

Summary of Investment Fees, Commissions, and Expenses

For the Year Ended June 30, 2016

	2016		2016
Debt Securities Managers		Private Equity Portfolio Managers (continued)	
AllianceBernstein L.P.	\$ 2,614,149	Endeavour Capital Fund VI	\$ 1,777,583
BlackRock Asset Management	2,649,072	Endeavour Capital Fund VII	1,123,500
KKR Financial Credit Portfolio	12,832,646	Essex Woodlands Health Ventures Fund VIII	1,401,705
Oak Hill Advisors	8,480,797	First Reserve Fund XI	1,163,673
Wellington Management Company, LLP	1,973,370	First Reserve Fund XII	1,907,074
Western Asset Management Company	2,010,918	Fisher Lynch Co-Investment Partnership II	4,250,005
Domestic Equity Fund Managers		Francisco Partners III	1,216,690
Aronson+Johnson+Ortiz, LP	2,199,657	Francisco Partners IV	2,250,000
Dimensional Fund Advisors	3,587,172	General Atlantic Partners	1,328,984
EAM Investors, LLC	1,185,939	GGV Capital IV	1,087,702
Hamilton Lane	1,568,101	GGV Capital V	1,250,000
The Boston Company Asset Management, LLC	1,843,878	GI Partners Fund IV	1,750,000
Wanger Asset Management, LP	2,547,247	Green Equity Investors VI	1,235,881
Wellington Management Company, LLP	2,234,912	Hamilton Lane SMID Fund	1,451,803
Other Domestic Equity Fund Managers	2,514,295	KKR 2006 Fund	3,276,746
International Equity Fund Managers		KKR European Fund III	2,014,085
Acadian Asset Management, Inc.	2,801,283	KKR Millennium Fund	1,025,836
AllianceBernstein International	3,357,037	KSL Capital Partners III	1,038,705
AQR Capital Management	3,775,778	KSL Capital Partners IV	1,528,253
Arrowstreet Capital, LP	8,546,303	Lion Capital Fund III	1,264,641
Brandes Investment Partners LLC	3,144,586	Littljohn Fund IV	1,181,253
Dimensional Fund Advisors	3,531,362	MHR Institutional Partners IV	3,502,431
Genesis Investment Management, Ltd.	3,359,408	North Haven Private Equity Asia IV	1,500,000
Harris Associates	2,390,841	Northwest Emerging Ventures III	1,000,000
Lazard Asset Management	3,960,663	Oak Hill Capital Partners III	1,116,152
Pyramis Global Investors	6,017,596	Oak Investment Partners XII	1,031,250
TT International Co., Ltd.	2,045,440	Oak Investment Partners XIII	1,500,000
Victory Capital Management	1,834,579	Oaktree Opportunities Fund IX	1,200,000
Walter Scott & Partners Limited	2,548,756	Oaktree Principal Fund V	1,068,064
Wells Capital Management	1,998,284	Orchid Asia VI	1,500,000
Westwood Global Investments	1,476,514	Palladium Equity Partners IV	1,600,000
William Blair & Company, LLC	2,621,829	Parthenon Investors IV	1,500,000
Other International Equity Fund Managers	1,061,299	Pathway Private Equity Fund III-B	2,794,439
Real Estate Portfolio Managers		Pine Brook Capital Partners II	1,749,052
Alpha Asia Macro Trends Fund II	2,496,000	Providence Equity Partners VI	1,149,250
Amstar - OR Partners LLC / Ascendis	1,637,625	Providence Equity Partners VII	2,250,000
Blackstone Real Estate Partners VII, LP	1,115,029	Public Pension Capital	1,506,004
Brazil Real Estate Opportunities II	1,581,522	Rhône Partners V	3,998,160
Clarion	1,305,417	Riverside Capital Appreciation Fund VI	1,500,000
Clarion Columbia Office Prope	3,007,988	RRJ Capital Master Fund III	1,962,043
DivcoWest Fund IV REIT, L.P.	1,096,307	Sofinnova Venture Partners VIII	1,153,800
Fortress Investment Fund V	1,419,275	Tailwind Capital Partners II	1,125,000
GI Partners Fund III	1,136,814	TDR Capital III	1,413,991
Harrison Street Real Estate Partners V-A	1,725,000	TPG Growth III	3,342,111
LaSalle REIT	2,633,002	TPG Partners VI	3,552,382
Lincoln	2,768,205	TPG Partners VII	10,308,836
Lone Star Fund IX	3,570,229	Veritas Capital Fund V	3,033,515
Lone Star Real Estate Fund III	1,154,028	Vestar Capital Partners VI	1,125,000
Lone Star Real Estate Fund IV	2,250,704	Vista Equity Partners Fund IV	1,500,000
LORE One, L.P. (Core)	1,108,863	Vista Equity Partners Fund V	3,000,000
LORE One, L.P. (Value Add)	2,171,508	Vista Foundation Fund II	1,500,000
Madison Realty Debt III	4,370,546	Wellspring Capital Partners V	1,797,202
Morgan Stanley Global REIT	2,323,944	Other Private Equity Portfolio Managers	58,130,559
OCH Ziff Real Estate Fund III	1,250,000	Alternatives Portfolio Managers	
Regency Core	1,232,917	Alinda Infrastructure Partners II	1,947,950
Regency II	1,076,949	Alterna Core Capital Assets Fund II	1,500,000
Rockwood Capital RE Partners VII	1,247,500	Apian Natural Resources Fund	1,000,000
Starwood Cap Hospitality Fd II Global LP	1,305,903	Energy and Minerals Group Fund III	2,530,769
Talmage Separate Account/Guggenheim	2,053,873	EnerVest Energy Institutional Fund XIV	3,000,000
Waterton Residential Property Venture XI	1,236,659	Global Infrastructure Capital Solutions Fund	2,687,763
Waterton Residential Property Venture XII	1,250,000	Global Infrastructure Partners II	2,289,894
WCRF	3,358,133	Global Infrastructure Partners III	2,187,978
Other Real Estate Portfolio Managers	19,403,099	Highstar Capital Fund IV	1,500,000
Private Equity Portfolio Managers		LS Power Equity Partners III	1,500,000
Advent Latin American Private Equity VI-C	1,504,032	NGP Natural Resources X	1,218,167
Apax VIII-B	2,256,565	NGP Natural Resources XI	1,585,780
Apollo Investment Fund VIII	4,399,863	Orion Mine Finance Fund I	1,312,500
Aquiline Financial Services Fund II	1,319,604	Sheridan Production Partners I-B	1,250,000
Aquiline Financial Services Fund III	1,757,192	Sheridan Production Partners III-B	3,750,000
Asia Opportunity Fund III	1,286,831	Taurus Mining Finance Fund	1,250,000
Baring Asia Private Equity Fund V	1,351,481	Warwick Partners III	2,663,728
Baring Asia Private Equity Fund VI	3,510,000	Other Alternatives Portfolio Managers	7,422,358
BDCM Opportunity Fund II	1,194,156	Opportunity Portfolio Managers	
BDCM Opportunity Fund IV	2,903,994	Brokerage Commissions	
Blackstone Capital Partners VI	2,643,036	Consultant Fees	
Blackstone Energy Partners II	2,373,222	State Street Bank:	
Capital International Private Equity Fund VI	1,212,462	Commission Expense - Option Future	125,473
CDH Fund V	1,784,300	Foreign Income Taxes	12,255,507
Centerbridge Capital Partners II	1,369,849	Operating Expenses ¹	72,229,944
Centerbridge Capital Partners III	2,027,790	Other Expenses ²	4,301,936
Collier International Partners VI	1,284,714	State Treasury Fees	
Court Square Capital Partners III	1,125,000	Deferred Compensation Investment Fees and Expenses	
CVC Capital Partners VI	2,505,696	Other Investment Fees and Expenses	
EnCap Energy Capital Fund X	1,350,000	Total Investment Fees, Commissions and Expenses	
		\$	553,723,627

¹Start up fee for new private equity fund and improvement made to real estate property.

²Expenses related to legal expenses, travel, consulting, and OIC directed expenditures.

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Investment Section

JOHN D. SKJERVEM
CHIEF INVESTMENT OFFICER
INVESTMENT DIVISION



PHONE 503-431-7900
FAX 503-620-4732

STATE OF OREGON
OFFICE OF THE STATE TREASURER
16290 SW UPPER BOONES FERRY ROAD
TIGARD, OREGON 97224

November 2, 2016

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 \$89.2 billion as of June 30, 2016. This portfolio includes the Oregon Public Employee Retirement Fund (OPERF), the assets of which totaled \$68.3 billion at June 30, 2016 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 3-, 5- and 10-year periods ended June 30, 2016 were 7.2%, 7.1% and 6.0%, respectively¹. 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., 2013), 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.

The U.S. stock market (as measured by the Russell 3000 index) generated modest returns last fiscal year (FY 2016), advancing 2.1% over the 12-month period ended June 30, 2016. With a minor, net loss of

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

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November 2, 2016
Page 2

0.3%, OPERF's U.S. public equity portfolio lagged the 2.1% return of its benchmark due to an emphasis on small capitalization stocks, a proxy for which (namely, the Russell 2000 index) registered a 6.7% decline in FY 2016. However, all domestic stocks compared favorably to foreign equities in FY 2016 as most international and emerging market indices recorded a second, consecutive year of decidedly negative results. OPERF managers investing abroad produced a collective 8.1% loss last fiscal year, disappointing but marginally better than the 9.6% decline in OPERF's non-U.S. public equity benchmark, the MSCI ACWI Ex-US IMI Net index.

With an estimated fiscal year-end value of \$13.7 billion, OPERF's private equity investments represented 20.1% of total OPERF assets at June 30, 2016, and generated a net gain of 4.5% in FY 2016. This result exceeded the private equity portfolio's 2.7% benchmark return, and average annual returns over the previous 10-year period remain satisfactory at 9.9% vs. 10.5% for this same benchmark, the Russell 3000 (lagged one quarter) plus 300 basis points.

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 2016, OPERF's real estate investments generated a 10.9% net return, slightly behind the 11.8% return on OPERF's real estate benchmark, the NCREIF index, lagged one quarter. At fiscal year-end, these real estate investments were valued at \$8.6 billion, and represented 12.6% of total OPERF assets. For the ten-year period ended June 30, 2016, OPERF's real estate portfolio delivered an 6.1% net average annual return, shy of the benchmark's 7.6% average annual return during that same period.

Bond markets delivered modest but volatile results in FY 2016, driven primarily by the competing and at times opposing forces of persistently tepid economic growth and daily speculation regarding changes in U.S. Federal Reserve monetary policy. Investments in fixed income securities comprised 21.1% of total OPERF assets at June 30, 2016, and contributed a 3.6% net return in FY 2016, essentially matching the 3.7% return recorded by OPERF's custom fixed income benchmark.

Finally, OPERF investments in "alternative" assets and "opportunistic" strategies contributed mixed results in FY 2016 (-0.8% and 0.4%, 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 hedge funds. At June 30, 2016, these alternative asset and opportunistic strategies comprised only 6.4% 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

Oregon Public Employees Retirement System

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](http://www.oregon.gov/treasury/Divisions/Investment/Pages/Oregon-Investment-Council-(OIC).aspx).

Investment Results*

Periods Ending June 30, 2016

	1-Year	Annualized	
		3-Year	5-Year
Total Portfolio, Excluding Variable Account	1.21 %	7.17 %	7.10 %
Policy Benchmark ¹	1.62	7.99	7.75
Variable Account	(3.43)	6.47	5.81
Benchmark: MSCI All Country World Investable Market Index Net	(3.87)	6.13	5.43
Domestic Stocks	(0.28)	9.95	10.54
Benchmark: Russell 3000 Index	2.14	11.13	11.60
International Stocks	(8.12)	3.13	2.04
Benchmark: MSCI All Country World ex-US Investable Market Index Net	(9.61)	1.65	0.39
Fixed Income Segment	3.63	3.52	4.32
Benchmark: Custom Index ²	3.67	3.15	3.79
Real Estate ³	10.86	11.86	11.72
Benchmark: NCREIF Property Index ³	11.81	11.90	11.92
Private Equity ⁴	4.52	10.78	10.33
Benchmark: Russell 3000 Index + 300 bps ³	2.65	14.45	14.32
Alternative Equity	(0.79)	0.67	1.17
Benchmark: Consumer Price Index + 400bps	5.04	5.10	5.37
Opportunity Portfolio	0.36	5.86	6.84
Benchmark: Russell 3000 Index	2.14	11.13	11.60

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 Prior to October 1, 2013, policy benchmark was 46% Morgan Stanley Capital International All Country World Index (MSCI ACWI) Net, 27% Custom Fixed Income (FI) Benchmark, 16% Russell 3000 + 300bps, and 11% National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index.

From October 1, 2013 through March 31, 2016, policy benchmark was 41.50% MSCI ACWI Net, 23.50% Custom FI Benchmark, 20% Russell 3000 + 300bps, 12.50% NCREIF Property, and 2.50% Consumer Price Index + 400bps.

From April 1, 2016 to current, policy benchmark is 41.50% MSCI ACWI Net, 23.50% Custom FI Benchmark, 20% Russell 3000 + 300bps, and 2.50% Consumer Price Index + 400bps.

² Prior to February 28, 2011, index was Oregon Custom FI 90/10 Benchmark. (90% Barclays Capital (BC) U.S. Universal Index and 10% Solomon Smith Barney Inc. Non-US World Gov't Bond Hedged Index).

From March 1, 2011 to December 31, 2013, index was 60% 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 Time-weighted returns are calculated using quarterly basis based on the quarter lagged market values that are cash flow adjusted.

⁴ Beginning in April 2010, the return combines the estimated return using the internal rate of return for the most recent lagged quarter with a revision component that trues up the past two quarters' reported returns with the past two quarters' revised and final returns.

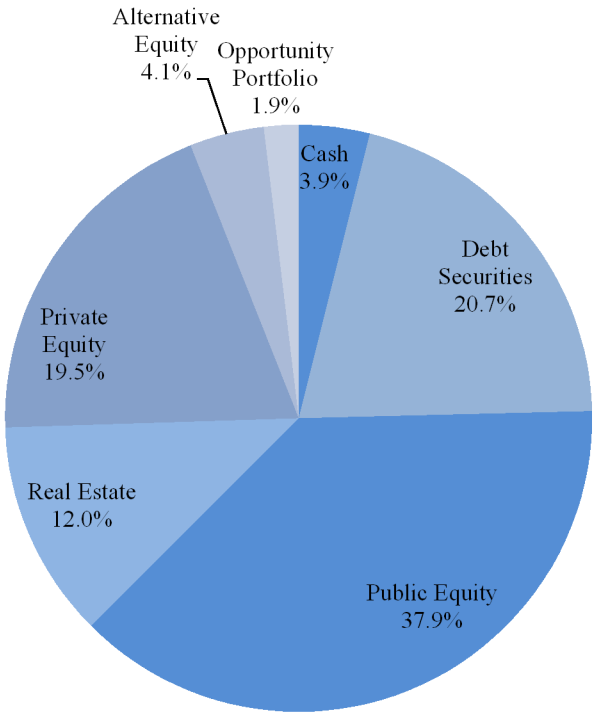
* Investment Results are based upon OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of individual holdings.

OIC Target and Actual Investment Allocation as of June 30, 2016*

Asset Class/Strategy	OIC Policy Range	OIC Target Allocation	Asset Class/Strategy	Actual Allocation
Cash	0.0 - 3.0 %	0.0 %	Cash	3.9 %
Debt Securities	15.0 - 25.0	20.0	Debt Securities	20.7
Public Equity	32.5 - 42.5	37.5	Public Equity	37.9
Real Estate	9.5 - 15.5	12.5	Real Estate	12.0
Private Equity	13.5 - 21.5	17.5	Private Equity	19.5
Alternative Equity	0.0 - 12.5	12.5	Alternative Equity	4.1
Opportunity Portfolio ¹	0.0 - 3.0	0.0	Opportunity Portfolio	1.9
Total		100.0 %	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, 2016**

<u>Description</u>	<u>Shares</u>	<u>Fair Value</u>
Exxon Mobil Corporation	2,516,767	\$ 235,921,739
Apple Inc.	2,112,982	202,001,079
AT&T Inc.	4,172,938	180,312,651
Johnson & Johnson	1,457,538	176,799,359
Microsoft Corp.	2,904,801	148,638,667
JPMorgan Chase & Co.	2,093,571	130,094,502
Pfizer Inc	3,662,589	128,959,759
Verizon Communications Inc.	2,259,275	126,157,916
Intel Corp.	3,232,825	106,036,660
Chevron Corporation	930,697	97,564,967

**Largest Bond Holdings (by Fair Value)
June 30, 2016**

<u>Description</u>	<u>Par Value</u>	<u>Fair Value</u>
US Treasury Note 1.500% Due February 28, 2023	270,325,000	\$ 274,253,093
US Treasury Note 1.375% Due April 30, 2021	169,195,000	172,116,321
US Treasury Note 0.875% Due May 31, 2018	169,370,000	170,289,679
US Treasury Note 1.875% Due September 30, 2017	159,032,000	161,634,877
US Treasury Note 0.875% Due March 31, 2018	156,775,000	157,540,532
US Treasury Note 2.000% Due July 31, 2020	144,608,000	150,917,681
US Treasury Note 0.625% Due June 30, 2018	142,550,000	142,616,856
US Treasury Note 2.125% Due June 30, 2022	134,564,000	141,880,918
US Treasury Note 2.250% Due November 15, 2024	117,602,000	125,448,288
US Treasury Note 3.000% Due November 15, 2044	108,620,000	124,887,583

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

Oregon Public Employees Retirement System

Schedule of Fees and Commissions

For the Fiscal Year Ended June 30, 2016

	Assets Under Management	Fees	Percentage
Investment Managers' Fees:			
Debt Securities Managers	\$ 14,768,509,332	\$ 30,560,952	0.21 %
Public Equity Managers	27,063,910,456	72,478,320	0.27
Real Estate Managers	8,585,785,027	72,287,039	0.84
Private Equity Managers	13,954,350,332	198,093,147	1.42
Alternative Equity Managers	2,948,607,060	40,596,887	1.38
Opportunity Portfolio Managers	1,364,144,854	15,141,478	1.11
Total Assets Under Management	\$ 68,685,307,061		

Other Investment Service Fees:

Investment Consultants	5,155,437
Commissions and Other Fees	119,410,367
Total Investment Service and Managers' Fees	\$ 553,723,627

Schedule of Broker Commissions

For the Fiscal Year Ended June 30, 2016

Broker's Name	Commission	Shares / Par	Commission per Share
Goldman, Sachs & Co.	\$ 1,721,020	158,084,643	\$ 0.0109
INSTINET	1,143,617	626,259,130	0.0018
UBS Securities Inc.	1,053,720	250,714,825	0.0042
J.P. Morgan Securities Inc.	1,029,556	178,628,327	0.0058
Barclays Capital, Inc.	889,504	37,864,967	0.0235
Credit Suisse First Boston	876,154	190,627,870	0.0046
Merrill Lynch & Co., Incorporated	846,175	255,232,670	0.0033
Citigroup Global Markets Inc	684,622	110,872,257	0.0062
Morgan Stanley	648,706	135,954,724	0.0048
Jefferies & Company, Inc.	607,074	96,963,620	0.0063
Deutsche Bank	575,602	111,126,982	0.0052
Investment Technology Group Inc.	336,806	88,756,120	0.0038
Société Générale	257,456	153,659,668	0.0017
Macquarie Securities	255,523	110,232,031	0.0023
Liquidnet, Inc.	242,664	25,560,576	0.0095
HSBC	233,028	56,566,376	0.0041
Royal Bank of Canada	202,440	9,305,491	0.0218
Broadcort Capital Corp.	194,986	7,930,252	0.0246
Merrill Lynch, Pierce, Fenner & Smith Inc.	181,647	20,250,327	0.0090
Bloomberg Tradebook	177,950	13,416,195	0.0133

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, 2016	Percent of Total Fair Value¹
Debt Securities		
US Government Securities	\$ 6,150,969,258	8.96 %
US Agency Securities	1,302,611,871	1.90
Corporate Bonds	4,108,060,539	5.98
Asset-Backed Securities	1,302,100,760	1.90
International Debt Securities	932,101,682	1.36
Non-US Government Debt Securities	102,097,212	0.15
Municipal Bonds	38,716,191	0.06
Guaranteed Investment Contracts ²	171,265,727	0.25
Domestic Fixed Income Funds	610,304,712	0.89
International Fixed Income Funds	50,281,380	0.07
Total Debt Securities	14,768,509,332	21.52
Public Equity		
Domestic Equity Securities	10,506,911,071	15.30
International Equity Securities	9,150,695,658	13.32
Domestic Equity Funds	2,665,179,334	3.88
Global Equity Funds	1,884,478,180	2.74
International Equity Funds	2,398,987,297	3.49
Target Date Fund	457,658,916	0.67
Total Public Equity	27,063,910,456	39.40
Real Estate	8,585,785,027	12.50
Private Equity	13,954,350,332	20.31
Alternative Equity	2,948,607,060	4.28
Opportunity Portfolio	1,364,144,854	1.99
Total Fair Value	\$ 68,685,307,061	100.00 %

¹ These percentages do not include cash and cash equivalents.² Guaranteed Investment Contracts are stated at contract value

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November 23, 2016

Public Employees Retirement Board
Oregon Public Employees Retirement System

Re: Actuarial Valuation as of December 31, 2015

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, 2015. Our findings are set forth in the system-wide December 31, 2015 Actuarial Valuation, issued September 27, 2016. Previously, we published a system-wide December 31, 2014 Actuarial Valuation, which was issued November 12, 2015. 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, 2015 Actuarial Valuation and the December 31, 2014 Actuarial Valuation are used to develop information provided in the Comprehensive Annual Financial Report (CAFR) for Oregon PERS. The December 31, 2015 Actuarial Valuation forms the basis for the *Actuarial Section* of the CAFR, and also provides information for the Other Postemployment Benefit Programs (OPEB) required by Governmental Accounting Standards Board Statements No. 43 that appears in the *Notes to the Financial Statements and Required Supplementary Information*. The December 31, 2014 Actuarial Valuation is used to develop the financial reporting results required by Governmental Accounting Standards Board Statements No. 67 for the Tier 1/Tier 2 and OPSRP 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, 2015 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, 2015 Actuarial Valuation and the December 31, 2014 Actuarial Valuation were adopted by the PERB



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Public Employees Retirement Board
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based upon the results of the 2014 Experience Study conducted by Milliman, issued September 23, 2015. The assumptions and methods were selected in a manner consistent with current Actuarial Standards of Practice. The assumptions and methods used for setting the actuarially determined contribution rates for the OPEB plans do not always meet the calculation parameters set for Annual Required Contribution financial reporting disclosures by Governmental Accounting Standards Board Statements No. 43. Where the actuarially determined OPEB contribution rate does not meet GASB No. 43 parameters, the Annual Required Contribution for financial reporting purposes has been adjusted to satisfy the GASB parameters.

Milliman prepared the following information that is presented in the *Actuarial Section* of the 2016 Comprehensive Annual Financial Report (CAFR) based on the December 31, 2015 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
- Schedules of Employer Contributions
- Notes to Required Supplementary Schedules

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, 2015 Actuarial Valuation.

Financial Reporting Under GASB 67

Under GASB 67, the required financial reporting schedules present information using a Measurement Date of the System's fiscal year end. The Total Pension Liability for the June 30, 2016 fiscal year end was determined based on the results of the December 31, 2014 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 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.

Milliman prepared the following exhibits 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)
- Schedule of Changes in Net Pension Liability (Asset) and Related Ratios
- Long Term Expected Rate of Return



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These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 67 Reporting for Fiscal Year End 2016* letter dated November 22, 2016.

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, 2015 Actuarial Valuation were adopted by the PERB and established employer contributions for the July 1, 2017 to June 30, 2019 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, 2015, there are also 131 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.

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.



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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 September 2015 public meeting.

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. 43, 45, 67, and 68 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. 43, 45, 67, and 68. 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.



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Public Employees Retirement Board
Oregon Public Employees Retirement System
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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. Prepper, FSA, EA, MAAA
Principal and Consulting Actuary



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Tier 1/Tier 2 (including Retiree Healthcare)

Actuarial Methods and Valuation Procedures

In September 2015 the Board adopted the following actuarial methods and valuation procedures for the December 31, 2014 and 2015 actuarial valuations of PERS Tier 1/Tier 2 benefits.

<i>Actuarial cost method</i>	<p>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.</p> <p>A detailed description of the calculation follows:</p> <ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> – 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.
<i>Tier 1/Tier 2 UAL amortization</i>	<p>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.</p>

Milliman Actuarial Valuation

**Actuarial Methods and Assumptions
Tier 1/Tier 2 (including Retiree Healthcare)**

<i>Retiree Healthcare UAL amortization</i>	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.
<i>Asset valuation method</i>	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.
<i>Contribution rate stabilization method</i>	Contribution rates for a rate pool (e.g. Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, 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.
<i>Allocation of Liability for Service Segments</i>	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 25% (0% for police & fire) based on account balance with each employer and 75% (100% for police & fire) based on service with each employer. The entire normal cost is allocated to the current employer.
<i>Allocation of Benefits-In-Force (BIF) Reserve</i>	The BIF reserve is allocated to each rate pool in proportion to the retiree liability attributable to the rate pool.



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier 1/Tier 2 (including Retiree Healthcare)

Economic Assumptions

The Board adopted the following economic assumptions for the December 31, 2014 and 2015 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2014 Experience Study, published in September 2015. The assumption selection process and rationale is described in detail in that report.

<i>Investment return</i>	7.50% compounded annually
<i>Pre-2014 Interest crediting</i>	8.00% compounded annually on members' regular account balances 8.25% compounded annually on members' variable account balances
<i>Post-2013 Interest crediting</i>	7.50% compounded annually on members' regular account balances 7.50% compounded annually on members' variable account balances
<i>Inflation</i>	2.50% compounded annually
<i>Administrative expenses</i>	\$33.0 million per year is added to the normal cost.
<i>Payroll growth</i>	3.50% compounded annually. This assumption represents the sum of the inflation assumption and a real wage growth assumption of 100 basis points.
<i>Healthcare cost trend</i>	Health cost trend rates are used to predict increases in the RHIPA Maximum Subsidy. These rates include consideration of the excise tax that will be introduced in 2018 by the Patient Protection and Affordable Care Act.

Year ¹	Rate	Year	Rate
2016	6.3	2044 – 2045	5.7
2017	6.0	2046 – 2049	5.6
2018	5.4	2050 – 2055	5.5
2019	5.3	2056 – 2061	5.4
2020 – 2024	5.4	2062	5.3
2025 – 2027	5.5	2063	5.2
2028	6.4	2064	5.1
2029	6.5	2065	5.0
2030 – 2034	6.4	2066	4.9
2035	6.3	2067	4.8
2036	6.2	2068 – 2069	4.7
2037	6.1	2070	4.6
2038	6.0	2071 – 2093	4.5
2039 – 2040	5.9	2094+	4.4
2041 – 2043	5.8%		

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



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Demographic Assumptions

The Board adopted the following demographic assumptions for the December 31, 2014 and 2015 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2014 Experience Study, published in September 2015. The study relied on data from an observation period of January 1, 2011 to December 31, 2014, with the exception of the merit scale assumption, which relied on data from 2006 through 2014. 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. The projection scale was first adopted in the December 31, 2014 valuation.

Basic Table	RP 2000, Generational (Scale BB) Combined Active/Healthy Annuitant, Sex Distinct	Valuation Year Adopted
School District male	No collar, set back 24 months	2012
Other General Service male*	Blended 25% blue collar / 75% white collar, set back 12 months	2010
Police & Fire male	Blended 25% blue collar / 75% white collar, set back 12 months	2012
School District female	No collar, set back 24 months	2014
Other female**	Blended 25% blue collar / 75% white collar, no set back	2014

* 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, 2014 actuarial valuation.

Basic Table	RP 2000, Generational (Scale BB), Combined Disabled, No Collar, Sex Distinct
Male	70% of Disabled table, but not less than the corresponding healthy annuity rates
Female	95% of Disabled table, but not less than the corresponding healthy annuity rates



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier 1/Tier 2 (including Retiree Healthcare)

Non-Annuitant Members

The following mortality rates were first adopted for non-annuitant members for the December 31, 2014 actuarial valuation.

Basic Table	Percent of Healthy Retired Mortality Tables
School District male	60%
Other General Service male	75%
Police & Fire male	75%
School District female	55%
Other female	60%

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, 2014 valuation.

	Police & Fire			General Service			School Districts			Judges
Age	< 13 yrs	13-24 yrs	25+ yrs	<15 yrs	15-29 yrs	30+ yrs	<15 yrs	15-29 yrs	30+ yrs	
Less than 50						15.00%			15.00%	
50	1.50%	2.00%	24.00%			15.00%			15.00%	
51	1.50%	2.00%	17.50%			15.00%			15.00%	
52	1.50%	2.00%	17.50%			15.00%			25.00%	
53	1.50%	2.00%	17.50%			17.50%			25.00%	
54	1.50%	2.00%	17.50%			17.50%			25.00%	
55	5.00%	8.00%	23.50%	1.50%	3.00%	17.50%	1.50%	4.50%	25.00%	
56	5.00%	8.00%	23.50%	1.50%	3.00%	17.50%	1.50%	4.50%	25.00%	
57	5.00%	8.00%	23.50%	1.50%	3.00%	20.00%	1.50%	4.50%	25.00%	
58	5.00%	8.00%	23.50%	1.50%	10.00%	20.00%	2.50%	14.50%	32.00%	
59	5.00%	8.00%	23.50%	3.50%	10.00%	20.00%	4.50%	14.50%	28.50%	
60	5.00%	11.00%	23.50%	6.00%	10.00%	20.00%	6.50%	14.50%	28.50%	10.00%
61	5.00%	14.00%	23.50%	6.00%	10.00%	24.00%	8.00%	14.50%	28.50%	10.00%
62	15.00%	25.00%	38.00%	12.50%	19.50%	31.00%	15.00%	25.00%	34.00%	10.00%
63	7.00%	17.00%	38.00%	12.50%	16.50%	22.00%	13.00%	22.00%	26.50%	10.00%
64	7.00%	17.00%	17.00%	12.50%	16.50%	26.00%	13.00%	19.50%	31.50%	10.00%
65	100.00%	100.00%	100.00%	19.50%	28.00%	32.00%	25.50%	33.50%	38.00%	10.00%



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier 1/Tier 2 (including Retiree Healthcare)

	Police & Fire			General Service			School Districts			Judges
66				25.50%	35.00%	38.00%	21.50%	36.50%	38.00%	10.00%
67				22.50%	25.00%	26.00%	19.50%	34.50%	38.00%	10.00%
68				19.50%	25.00%	26.00%	19.50%	28.00%	28.50%	10.00%
69				19.50%	25.00%	26.00%	19.50%	28.00%	28.50%	30.00%
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, 2014.

Lump Sum Option at Retirement	
Partial Lump Sum:	4.5% for all years
Total Lump Sum:	2.5% for 2016, declining by 0.5% per year until reaching 0.0%
No Lump Sum:	93.0% in 2015, increasing by 0.5% per year until reaching 95.5%

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, 2010.

Purchase of Credited Service at Retirement	
Money Match Retirements:	0%
Non-Money Match Retirements:	60%

Judge Member Plan Election

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



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier 1/Tier 2 (including Retiree Healthcare)**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, 2010.

Percentage of the 1985 Disability Class 1 Rates	
Duty Disability Police & Fire	20%
Duty Disability General Service	0.9%
Ordinary Disability	50% with 0.18% cap

Termination Assumptions

The termination assumptions were first adopted effective December 31, 2012, 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	20.00%	15.50%	19.00%	18.50%	10.00%
1	16.00%	14.05%	17.16%	17.00%	5.97%
5	8.24%	8.35%	8.36%	9.29%	3.31%
10	4.23%	4.36%	3.96%	5.24%	2.23%
15	2.78%	2.98%	2.86%	3.66%	1.50%
20	1.82%	2.23%	2.07%	2.63%	1.01%
25	1.20%	1.67%	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 2014 Experience Study report for the System, published in September 2015.

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.



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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, 2014.

Duration	School District	Other General Service	Police & Fire
0	3.53%	3.95%	5.17%
1	3.20%	3.55%	4.57%
5	2.01%	2.24%	2.71%
10	0.82%	1.22%	1.41%
15	-0.07%	0.71%	0.90%
20	-0.67%	0.52%	0.81%
25	-0.91%	0.45%	0.76%
30	-0.94%	0.29%	0.39%
31+	-0.94%	0.00%	0.00%

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

For a complete table of rates, please refer to the 2014 Experience Study for the System, published in September 2015.

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. Local general service females, school district males, and dormant members were adopted effective December 31, 2014. The state general service male, state general service female and local police and fire rates were adopted effective December 31, 2010. All other rates were adopted effective December 31, 2012.

Unused Sick Leave	
Actives	
• State General Service Male	6.25%
• State General Service Female	3.75%
• School District Male	7.25%
• School District Female	5.75%
• Local General Service Male	4.75%
• Local General Service Female	3.25%
• State Police & Fire	4.75%
• Local Police & Fire	7.50%
Dormant Members	3.00%



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
Tier 1/Tier 2 (including Retiree Healthcare)

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, 2014, except the school district rates which were adopted effective December 31, 2012.

Vacation Pay	
Tier 1	
• State General Service	1.60%
• School District	0.25%
• Local General Service	2.20%
• State Police & Fire	1.80%
• Local Police & Fire	2.90%
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	26.0%
• 25 – 29 years of service	29.0%
• 30+ years of service	38.0%
RHIA	
• Healthy Retired	38.0%
• Disabled Retired	20.0%

The RHIA disabled retired rate was first adopted December 31, 2008. The RHIPA rates up through 14 years of service were first adopted effective December 31, 2012. All other rates were first adopted effective December 31, 2014.



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Milliman Actuarial Valuation

Actuarial Methods and Assumptions
OPSRP

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, 2014 and December 31, 2015 actuarial valuations.

Actuarial Methods and Valuation Procedures

<i>OPSRP UAL amortization</i>	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.
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Economic Assumptions

<i>Administrative expenses</i>	\$5.5 million per year is added to the normal cost.
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Demographic Assumptions

Retirement Assumptions

Rates of Retirement from Active Status

Age	Police & Fire			General Service			School Districts		
	< 13 yrs	13-24 yrs	25+ yrs	<15 yrs	15-29 yrs	30+ yrs	<15 yrs	15-29 yrs	30+ yrs
50	1.00%	1.50%	5.50%						
51	1.00%	1.50%	5.50%						
52	1.00%	1.50%	5.50%						
53	1.00%	1.50%	25.00%						
54	1.00%	1.50%	17.50%						
55	4.00%	5.00%	23.50%	1.00%	2.50%	5.00%	1.00%	2.50%	5.00%
56	4.00%	5.00%	23.50%	1.00%	2.50%	5.00%	1.00%	2.50%	5.00%
57	4.00%	5.00%	23.50%	1.00%	2.50%	7.50%	1.00%	2.50%	7.50%
58	4.00%	5.00%	23.50%	1.00%	3.00%	30.00%	1.00%	3.00%	30.00%
59	4.00%	5.00%	23.50%	1.50%	3.00%	25.00%	1.50%	3.00%	25.00%
60	4.00%	15.00%	23.50%	3.00%	3.75%	20.00%	3.00%	3.75%	20.00%
61	4.00%	8.50%	23.50%	3.00%	5.00%	20.00%	3.00%	5.00%	20.00%
62	12.00%	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%	6.00%	10.00%	20.00%	6.00%	10.00%	20.00%
65	100.00%	100.00%	100.00%	13.00%	35.00%	20.00%	12.00%	35.00%	20.00%
66				15.50%	33.00%	20.00%	14.00%	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%

Rates of Retirement from Dormant Status

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



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

A summary of key changes implemented since the December 31, 2014 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, 2014 valuation.

Changes in Economic Assumptions

There were no changes to economic assumptions since the December 31, 2014 valuation.

Changes in Demographic Assumptions

There were no changes to demographic assumptions since the December 31, 2014 valuation.



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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
12/31/2006 ³	163,261	\$ 7,326,798	\$ 44,878	3.4%	758
12/31/2007	167,023	\$ 7,721,819	\$ 46,232	3.0%	760
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

¹ Effective in 2006, participating employers are defined for this purpose as any employer with covered payroll during the prior year. In prior years, employers with liabilities but without covered payroll were included as well.

² Effective in 2001, the Annual Payroll excludes the member pick-up, if any.

³ Effective with the 12/31/2005 valuation, OPSRP members and payroll are included.

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Annual Allowances are shown in thousands.

Valuation Date	Added to Rolls		Removed from Rolls		Rolls - End of Year		% Increase in Annual Allowances ¹	Average Annual Allowances
	Count	Annual Allowances	Count	Annual Allowances	Count	Annual Allowances		
12/31/2006 ²	5,060	\$ 151,240	3,263	\$ 39,735	104,720	\$ 2,378,704	4.9%	\$ 22,715
12/31/2007 ²	5,385	\$ 183,232	3,304	\$ 40,590	106,801	\$ 2,521,345	6.0%	\$ 23,608
12/31/2008 ²	5,963	\$ 171,484	3,626	\$ 47,062	109,138	\$ 2,645,767	4.9%	\$ 24,242
12/31/2009 ²	6,377	\$ 226,713	3,374	\$ 46,228	112,141	\$ 2,826,252	6.8%	\$ 25,203
12/31/2010 ²	6,359	\$ 217,424	3,512	\$ 51,627	114,988	\$ 2,992,048	5.9%	\$ 26,021
12/31/2011 ²	8,715	\$ 282,098	3,679	\$ 55,633	120,024	\$ 3,218,514	7.6%	\$ 26,816
12/31/2012 ²	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 ³	6,910	\$ 235,250	3,524	\$ 66,621	131,638	\$ 3,804,651	4.6%	\$ 28,902
12/31/2015 ³	8,566	\$ 304,818	3,781	\$ 73,305	136,423	\$ 4,036,165	6.1%	\$ 29,586

¹ Since last valuation date.

² 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.

³ 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						
12/31/2010	\$ 26,499.5	\$ 30,285.0	\$ 3,785.4	87.5%	\$ 3,333.1	113.6%
12/31/2011 ⁴	\$ 25,679.2	\$ 31,109.1	\$ 5,429.9	82.5%	\$ 3,179.3	170.8%
12/31/2012 ⁵	\$ 28,022.3	\$ 30,601.9	\$ 2,579.5	91.6%	\$ 3,043.7	84.7%
12/31/2013 ⁴	\$ 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 ⁴	\$ 30,185.3	\$ 38,396.8	\$ 8,211.5	78.6%	\$ 2,691.8	305.1%
Tier 1/Tier 2 School District Rate Pool						
12/31/2010	\$ 20,343.5	\$ 23,303.3	\$ 2,959.8	87.3%	\$ 2,027.5	146.0%
12/31/2011	\$ 19,668.2	\$ 23,973.7	\$ 4,305.5	82.0%	\$ 1,880.7	228.9%
12/31/2012 ⁵	\$ 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%
Tier 1/Tier 2 Independent Employers and Judiciary						
12/31/2010	\$ 4,189.4	\$ 4,913.1	\$ 723.7	85.3%	\$ 569.7	127.0%
12/31/2011 ⁴	\$ 4,083.2	\$ 5,069.8	\$ 986.6	80.5%	\$ 547.9	180.1%
12/31/2012 ⁵	\$ 4,479.4	\$ 5,043.4	\$ 564.0	88.8%	\$ 529.0	106.6%
12/31/2013 ⁴	\$ 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 ⁴	\$ 4,807.6	\$ 6,327.1	\$ 1,519.5	76.0%	\$ 460.3	330.1%
OPSRP Rate Pool						
12/31/2010	\$ 659.0	\$ 767.6	\$ 108.6	85.8%	\$ 2,819.8	3.9%
12/31/2011	\$ 840.5	\$ 986.4	\$ 145.9	85.2%	\$ 2,942.6	5.0%
12/31/2012 ⁵	\$ 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%
Postemployment Healthcare Benefits - Retirement Health Insurance Account						
12/31/2010	\$ 232.3	\$ 547.1	\$ 314.8	42.5%	\$ 5,930.3	5.3%
12/31/2011	\$ 239.6	\$ 461.1	\$ 221.5	52.0%	\$ 5,607.9	3.9%
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%
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account						
12/31/2010	\$ 5.7	\$ 33.9	\$ 28.2	16.8%	\$ 1,603.3	1.8%
12/31/2011	\$ 4.5	\$ 34.4	\$ 29.9	13.2%	\$ 1,539.5	1.9%
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%

Notes:

¹ Side account assets are included with Tier 1/Tier 2 assets.² Excludes effect of Multnomah Fire District (net UAAL of \$170 million as of 12/31/2015).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, UAAL is amortized using combined⁴ 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

Tier 1/Tier 2 Pension Program	\$ Gain (or Loss) for Year	
	2015	2014
Type of Activity		
Retirements from Active Status	\$ (65.5)	\$ 18.3
Active Mortality and Withdrawal	(25.3)	(40.9)
Pay Increases	(48.3)	(37.3)
Contributions	46.1	59.8
Interest Crediting Experience	53.5	18.6
Investment Income	(2,510.3)	(186.3)
Retirement, Mortality and Lump Sums from Dormant Status	(0.2)	0.9
Retiree and Beneficiary Mortality	(114.4)	(148.4)
New Entrants	(0.0)	(0.7)
Other	(42.4)	(34.7)
Gain (or Loss) During Year From Financial Experience	\$ (2,706.8)	\$ (350.8)
Non-Recurring Items		
Assumption Changes	0.0	(3,468.0)
Plan Changes	0.0	(5,027.0)
Composite Gain (or Loss) During Year	\$ (2,706.8)	\$ (8,845.8)

OPSRP Pension Program	\$ Gain (or Loss) for Year	
	2015	2014
Retirements from Active Status	\$ 7.3	\$ 3.8
Active Mortality and Withdrawal	(19.7)	(11.8)
Pay Increases	(20.7)	(32.9)
Contributions	0.8	22.3
Investment Income	(115.2)	2.6
Retirement, Mortality and Lump Sums from Dormant Status	3.0	2.4
Retiree and Beneficiary Mortality	0.8	(0.4)
New Entrants	(82.5)	(74.5)
Other	17.3	0.4
Gain (or Loss) During Year From Financial Experience	\$ (208.8)	\$ (88.1)
Non-Recurring Items		
Assumption Changes	0.0	(188.7)
Plan Changes	0.0	(70.7)
Composite Gain (or Loss) During Year	\$ (208.8)	\$ (347.5)

Oregon Public Employees Retirement System

Retiree Healthcare Programs	\$ Gain (or Loss) for Year			
	RHIA		RHIPA	
	2015	2014	2015	2014
Contributions	1.6	2.0	\$ 0.2	\$ 0.3
Investment Income	(22.3)	(2.3)	(0.6)	(0.1)
Other	8.1	7.7	4.9	3.5
Gain (or Loss) During Year From Financial Experience	(12.6)	7.4	4.5	3.7
Non-Recurring Items				
Assumption Changes	0.0	5.4	0.0	(11.5)
Composite Gain (or Loss) During Year	\$ (12.6)	\$ 12.8	\$ 4.5	\$ (7.8)

Oregon Public Employees Retirement System

Solvency Test

Tier 1/Tier 2 Pension

Valuation Date	Actuarial Accrued Liability			Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retired Members and Beneficiaries	Other Members				
	(1)	(2)	(3)		(1)	(2)	(3)
12/31/2010	\$ 8,407.9	\$ 34,000.0	\$ 16,154.0	\$ 50,924.5	100%	100%	53%
12/31/2011 ¹	\$ 7,779.7	\$ 37,001.1	\$ 15,431.2	\$ 49,327.7	100%	100%	29%
12/31/2012 ²	\$ 7,704.9	\$ 36,377.3	\$ 14,527.4	\$ 53,594.0	100%	100%	65%
12/31/2013 ¹	\$ 7,120.1	\$ 39,116.2	\$ 14,114.1	\$ 58,384.0	100%	100%	86%
12/31/2014 ³	\$ 6,950.4	\$ 46,113.5	\$ 17,331.0	\$ 59,370.6	100%	100%	36%
12/31/2015 ¹	\$ 6,476.8	\$ 48,641.5	\$ 17,335.7	\$ 57,611.0	100%	100%	14%

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

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.

OPSRP Pension

Valuation Date	Actuarial Accrued Liability			Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions	Retired Members and Beneficiaries	Other Members				
	(1)	(2)	(3)		(1)	(2)	(3)
12/31/2010	\$ 0.0	\$ 5.7	\$ 762.0	\$ 659.0	100%	100%	86%
12/31/2011	\$ 0.0	\$ 15.2	\$ 971.3	\$ 840.5	100%	100%	85%
12/31/2012 ¹	\$ 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 ²	\$ 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%

¹ 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.

² 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

Retiree Health Insurance Account (RHIA)								
Actuarial Accrued Liability								
Valuation Date	Active Member Contributions	Retired Members and Beneficiaries	Other Members	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets			
	(1)	(2)	(3)		(1)	(2)	(3)	
12/31/2010	\$ 0.0	\$ 415.0	\$ 132.1	\$ 232.3	0%	56%	0%	
12/31/2011	\$ 0.0	\$ 332.5	\$ 128.6	\$ 239.6	0%	72%	0%	
12/31/2012 ¹	\$ 0.0	\$ 338.3	\$ 133.5	\$ 291.6	0%	86%	0%	
12/31/2013	\$ 0.0	\$ 348.0	\$ 125.6	\$ 353.5	0%	100%	4%	
12/31/2014	\$ 0.0	\$ 355.1	\$ 113.3	\$ 395.9	0%	100%	36%	
12/31/2015	\$ 0.0	\$ 357.7	\$ 107.9	\$ 419.3	0%	100%	57%	

¹ 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	Active Member Contributions	Retired Members and Beneficiaries	Other Members	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets			
	(1)	(2)	(3)		(1)	(2)	(3)	
12/31/2010	\$ 0.0	\$ 11.8	\$ 22.2	\$ 5.7	0%	48%	0%	
12/31/2011	\$ 0.0	\$ 13.6	\$ 20.8	\$ 4.5	0%	33%	0%	
12/31/2012 ¹	\$ 0.0	\$ 15.1	\$ 45.3	\$ 4.4	0%	29%	0%	
12/31/2013	\$ 0.0	\$ 16.1	\$ 45.1	\$ 5.2	0%	33%	0%	
12/31/2014	\$ 0.0	\$ 15.7	\$ 54.9	\$ 7.2	0%	46%	0%	
12/31/2015	\$ 0.0	\$ 14.9	\$ 52.9	\$ 11.2	0%	75%	0%	

¹ The 12/31/2012 valuation reflects a change in cost method to Entry Age Normal.

Summary of Plan Provisions



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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.

<i>Membership</i>	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
<i>Member Contributions</i>	Judges	7% of salary
	All others	None
<i>Employer Contributions</i>	Set by the PERS Board based on actuarial calculations that follow Board rate-setting policies for employers.	



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Milliman Actuarial Valuation

Summary of Plan Provisions

<i>Early Retirement Eligibility</i>	Police and Fire	Age 50 or 30 years of service
	Judges	Age 60
	General Service	Age 55 or 30 years of service
<i>Early Retirement Allowance</i>	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.	
<i>Vesting</i>	Contributions made in any part of five calendar years or attainment of age 50 (45 for police & fire) while working in a qualifying position.	
<i>Termination Benefits</i>	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.
<i>Optional Forms of Retirement Allowance</i>	<p>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.</p> <p>Options Available</p> <ul style="list-style-type: none"> • 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. 	
<i>Preretirement Death Benefit Eligibility</i>	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.
<i>Preretirement Death Benefit</i>	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.
<i>Additional Police & Fire Death Benefits</i>	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.	
<i>Disability Benefit Eligibility</i>	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.



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Milliman Actuarial Valuation

Summary of Plan Provisions

<i>Disability Benefits</i>	<p>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.</p> <p>Fire and Police Members' Alternative</p> <p>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.</p> <p>Minimum Monthly Retirement Allowance</p> <p>Judges 45% of final average monthly salary.</p> <p>All others \$100 for a member with at least 15 years of creditable service, actuarially reduced if an optional form of benefit is chosen.</p> <p>Reduction of Benefits</p> <p>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.</p> <p>For Tier Two members, the disability benefit may not exceed the member's salary at the time of disablement.</p>
<i>Waiting Time Service Purchases</i>	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.
<i>Police & Fire Unit Purchases</i>	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.
<i>Automatic Postretirement Cost of Living Adjustments (COLAs)</i>	<p>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 <i>Moro v. State of Oregon</i>, automatic postretirement adjustments are based on a blended COLA as described below.</p> <p>Automatic COLA prior to SB 822 and SB 861</p> <p>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.</p> <p>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.</p> <p>Automatic Adjustments Provided by Senate Bills 822 and 861</p> <p>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.</p>



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Milliman Actuarial Valuation

Summary of Plan Provisions

	Blended COLA after <i>Moro</i> decision	The Supreme Court decision in <i>Moro</i> 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.
<i>Ad Hoc Adjustments</i>		From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits.
<i>Variable Annuity Program</i>	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.
<i>Interest Credit on Member Accounts</i>	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.
<i>Retiree Healthcare – Medicare Supplement (RHIA)</i>	Retiree Eligibility	All of the following must be met: <ul style="list-style-type: none"> (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 <i>either</i> of the following criteria are met: <ul style="list-style-type: none"> (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.



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Milliman Actuarial Valuation

Summary of Plan Provisions

	Benefit Amount	A monthly contribution of up to \$60 per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.																
<i>Retiree Healthcare – Under Age 65 (RHIPA)</i>	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 <i>either</i> 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 2016 is \$326.94 per month.																
		<table><tr><th>Years of Service with State Employer</th><th>Subsidized Amount</th></tr><tr><td>Under 8</td><td>0%</td></tr><tr><td>8-9</td><td>50%</td></tr><tr><td>10-14</td><td>60%</td></tr><tr><td>15-19</td><td>70%</td></tr><tr><td>20-24</td><td>80%</td></tr><tr><td>25-29</td><td>90%</td></tr><tr><td>30 & Over</td><td>100%</td></tr></table>	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%
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%																	
<i>Changes in Plan Provisions</i>	There were no changes in the Tier 1/Tier 2 benefit provisions reflected since the December 31, 2014 actuarial valuation.																	



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Milliman Actuarial Valuation

Summary of Plan Provisions

Summary of Chapter 238A Provisions — OPSRP

<i>Normal Retirement Date</i>	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
<i>Normal Retirement Allowance</i>	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%
<i>Final Average Salary</i>	<p>The greater of:</p> <ul style="list-style-type: none"> • 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. <p>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.</p>
<i>Early Retirement Eligibility</i>	Police & Fire Age 50 and 5 years of vesting service General Service Age 55 and 5 years of vesting service
<i>Early Retirement Allowance</i>	Normal retirement allowance, actuarially reduced to early retirement age.
<i>Vesting</i>	Five years or attainment of normal retirement age.
<i>Vested Termination Benefit</i>	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.
<i>Optional Forms of Retirement Benefit</i>	<p>The normal form of benefit is a life annuity. All optional amounts are adjusted to be actuarially equivalent.</p> <p>Options Available</p> <ul style="list-style-type: none"> • 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.
<i>Preretirement Death Benefit Eligibility</i>	Death of a vested member before retirement benefits begin.
<i>Preretirement Death Benefit</i>	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.



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Milliman Actuarial Valuation

Summary of Plan Provisions

<i>Disability Benefit Eligibility</i>	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.
<i>Disability Benefit Amounts</i>	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.
<i>Postretirement Adjustments</i>	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 <i>Moro v. State of Oregon</i> , 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.
<i>Changes in Plan Provisions</i>	There were no changes in the OPSRP benefit provisions reflected since the December 31, 2014 actuarial valuation.	



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Statistical Section

Oregon 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 well being have changed over time. Financial information is presented on an accrual basis.

The Schedules of Revenues by Source, Expenses 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 Expenses 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 post-employment 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 six 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, 2016, 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		Net Investment and Other Income	Total ¹
		Dollars ¹	Percent of Annual Covered Payroll		
2007	\$ 13,680,980	\$ 597,372,229	8.70 %	\$ 10,589,123,834	\$ 11,200,177,043
2008	11,937,362	763,164,823	10.30	(2,804,736,029)	(2,029,633,844)
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

Oregon Public Service Retirement Plan ¹
Individual Account Program

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2007	\$ 439,720,328	\$ N/A	N/A %	\$ 309,126,786	\$ 748,847,114
2008	465,517,744	N/A	N/A	(54,596,058)	410,921,686
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

Deferred Compensation Plan

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2007	\$ 66,152,631	\$ N/A	N/A %	\$ 129,511,435	\$ 195,664,066
2008	70,448,534	N/A	N/A	(74,030,166)	(3,581,632)
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

¹Balances restated for fiscal years 2012 due to prior period adjustments.

Oregon Public Employees Retirement System

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
2007	\$	2,574,588,942	\$	29,214,866	\$	41,222,535	\$	2,645,026,343
2008		2,768,305,300		27,061,038		50,660,781		2,846,027,119
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

Oregon Public Service Retirement Plan

Individual Account Program

Fiscal Year		Benefits		Administrative Expenses		Refunds		Total
2007	\$	36,379,230	\$	7,291,683	\$	N/A	\$	43,670,913
2008		55,478,104		7,871,419		N/A		63,349,523
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

Deferred Compensation Plan

Fiscal Year		Benefits		Administrative Expenses		Refunds		Total
2007	\$	49,835,260	\$	606,410	\$	N/A	\$	50,441,670
2008		50,366,273		800,668		N/A		51,166,941
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

¹Balances are restated for fiscal years 2007 to 2009 due to prior period adjustments.

**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 ¹	
				Beginning of Year	End of Year
2007	\$ 11,200,177,043	\$ 2,645,026,343	\$ 8,555,150,700	\$ 54,346,563,551	\$ 62,901,714,251
2008	(2,029,633,844)	2,846,027,119	(4,875,660,963)	62,901,714,251	58,026,053,288
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

**Oregon Public Service Retirement Plan²
Individual Account Program**

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2007	\$ 748,847,114	\$ 43,670,913	\$ 705,176,201	\$ 1,171,521,247	\$ 1,876,697,448
2008	410,921,686	63,349,523	347,572,163	1,876,697,448	2,224,269,611
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

Deferred Compensation Plan

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2007	\$ 195,664,066	\$ 50,441,670	\$ 145,222,396	\$ 832,178,641	\$ 977,401,037
2008	(3,581,632)	51,166,941	(54,748,573)	977,401,037	922,652,464
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

¹Balances are restated for fiscal years 2007 to 2009 and 2012 due to prior period adjustments.

Oregon Public Employees Retirement System

Additions by Source - OPEB

For the Last Ten Years Ended June 30:

Retirement Health Insurance Account

<u>Employer Contributions</u>		<u>Employer Contributions</u>		<u>Net Investment and Other Income</u>	<u>Total</u>
<u>Fiscal Year</u>	<u>Member Contributions</u>	<u>Dollars</u>	<u>Percent of Annual Covered Payroll</u>		
2007	\$ N/A	\$ 41,171,759	0.59 %	\$ 39,609,224	\$ 80,780,983
2008	N/A	27,783,093	0.37	(10,246,057)	17,537,036
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

Retiree Health Insurance Premium Account

<u>Employer Contributions</u>		<u>Employer Contributions</u>		<u>Net Investment and Other Income</u>	<u>Total</u>
<u>Fiscal Year</u>	<u>Member Contributions</u>	<u>Dollars</u>	<u>Percent of Annual Covered Payroll</u>		
2007	\$ N/A	\$ 2,399,843	0.13 %	\$ 1,301,049	\$ 3,700,892
2008	N/A	1,791,179	0.10	(312,725)	1,478,454
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

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

Retirement Health Insurance Account

Fiscal Year		Benefits		Administrative Expenses		Refunds		Total
2007	\$	26,887,060	\$	876,363	\$	N/A	\$	27,763,423
2008		27,624,361		899,601		N/A		28,523,962
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

Retiree Health Insurance Premium Account

Fiscal Year		Benefits		Administrative Expenses		Refunds		Total
2007	\$	2,047,322	\$	119,875	\$	N/A	\$	2,167,197
2008		1,906,431		104,880		N/A		2,011,311
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

Oregon Public Employees Retirement System**Changes in Plan Net Assets - OPEB****For the Last Ten Years Ended June 30:****Retirement Health Insurance Account**

Fiscal Year				Net Position	
	Additions	Deductions	Net Change	Beginning of Year	End of Year
2007	\$ 80,780,983	\$ 27,763,423	\$ 53,017,560	\$ 195,702,067	\$ 248,719,627
2008	17,537,036	28,523,962	(10,986,926)	248,719,627	237,732,701
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

Retiree Health Insurance Premium Account

Fiscal Year				Net Position	
	Additions	Deductions	Net Change	Beginning of Year	End of Year
2007	\$ 3,700,892	\$ 2,167,197	\$ 1,533,695	\$ 6,333,721	\$ 7,867,416
2008	1,478,454	2,011,311	(532,857)	7,867,416	7,334,559
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

Additions by Source - Retirement Programs
For the Last Ten Years Ended December 31¹:

Defined Benefit Pension Plan

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2006	\$ 10,751,524	\$ 605,587,796	8.27 %	\$ 7,920,833,371	\$ 8,537,172,691
2007	16,130,758	744,532,532	10.47	5,587,420,758	6,348,084,048
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

Oregon Public Service Retirement Plan
Individual Account Program

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2006	\$ 444,988,910	\$ N/A	N/A %	\$ 212,183,144	\$ 657,172,054
2007	451,403,761	N/A	N/A	197,649,097	649,052,858
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

Deferred Compensation Plan

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2006	\$ 63,268,289	\$ N/A	N/A %	\$ 90,212,220	\$ 153,480,509
2007	67,874,937	N/A	N/A	65,816,348	133,691,285
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

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

Oregon Public Employees Retirement System
Deductions by Type - Retirement Programs
For the Last Ten Years Ended December 31¹:

Defined Benefit Pension Plan

Calendar	Administrative			
Year	Benefits	Expenses ²	Refunds	Total
2006	\$ 2,514,479,244	\$ 24,438,769	\$ 61,059,360	\$ 2,599,977,373
2007	2,630,279,015	31,358,911	38,197,392	2,699,835,318
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

Oregon Public Service Retirement Plan
Individual Account Program

Calendar	Administrative			
Year	Benefits	Expenses	Refunds	Total
2006	\$ 30,051,229	\$ 8,061,455	\$ N/A	\$ 38,112,684
2007	47,529,077	7,583,898	N/A	55,112,975
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

Deferred Compensation Plan

Calendar	Administrative			
Year	Benefits	Expenses	Refunds	Total
2006	\$ 40,706,739	\$ 684,991	\$ N/A	\$ 41,391,730
2007	50,697,210	763,382	N/A	51,460,592
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

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

²Balances are restated for fiscal years 2006 to 2009 due to prior period adjustments.

Changes in Fiduciary Net Position - Retirement Programs
For the Last Ten Years Ended December 31^{1,4}:

Defined Benefit Pension Plan^{2,5}

Calendar Year				Net Position	
	Additions	Deductions	Net Change	Beginning of Year	End of Year
2006	\$ 8,537,172,691	\$ 2,599,977,373	\$ 5,937,195,318	\$ 52,750,575,483	\$ 58,687,770,801
2007	6,348,084,048	2,699,835,318	3,648,248,730	58,687,770,801	62,336,019,531
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

Oregon Public Service Retirement Plan³
Individual Account Program

Calendar Year				Net Position	
	Additions	Deductions	Net Change	Beginning of Year	End of Year
2006	\$ 657,172,054	\$ 38,112,684	\$ 619,059,370	\$ 935,410,609	\$ 1,554,469,979
2007	649,052,858	55,112,975	593,939,883	1,554,469,979	2,148,409,862
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

Deferred Compensation Plan

Calendar Year				Net Position	
	Additions	Deductions	Net Change	Beginning of Year	End of Year
2006	\$ 153,480,509	\$ 41,391,730	\$ 112,088,779	\$ 794,596,532	\$ 906,685,311
2007	133,691,285	51,460,592	82,230,693	906,685,311	988,916,004
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

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

²House 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.

³The Oregon Public Service Retirement Plan was added to the System in January 2004.

⁴Balances are restated for fiscal years 2005 to 2009 due to prior period adjustments.

⁵Balances restated for fiscal years 2013 and 2014 to correct amounts.

Oregon Public Employees Retirement System**Additions by Source - OPEB****For the Last Ten Years Ended December 31¹:****Retirement Health Insurance Account**

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2006	\$ N/A	\$ 39,481,902	0.54%	\$ 28,532,583	\$ 68,014,485
2007	N/A	35,457,965	0.45	22,089,579	57,547,544
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

Retiree Health Insurance Premium Account

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2006	\$ N/A	\$ 2,284,194	0.14	\$ 920,910	\$ 3,205,104
2007	N/A	2,148,731	0.03	688,777	2,837,508
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

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

Deductions by Type - OPEB**For the Last Ten Years Ended December 31¹:****Retirement Health Insurance Account**

Calendar Year	Benefits	Administrative Expenses	Refunds	Total
2006	\$ 26,552,598	\$ 978,785	\$ N/A	\$ 27,531,383
2007	27,244,840	888,308	N/A	28,133,148
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

Retiree Health Insurance Premium Account

Calendar Year	Benefits	Administrative Expenses	Refunds	Total
2006	\$ 2,158,432	\$ 140,794	\$ N/A	\$ 2,299,226
2007	1,923,159	111,240	N/A	2,034,399
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

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

Oregon Public Employees Retirement System

Change in Fiduciary Net Position - OPEB

For the Last Ten Years Ended December 31¹:

Retirement Health Insurance Account

Calendar Year		Net Position								
		Additions		Deductions		Net Change		Beginning of Year	End of Year	
2006	\$	68,014,485	\$	27,531,383	\$	40,483,102	\$	180,862,460	\$	221,345,562
2007		57,547,544		28,133,148		29,414,396		221,345,562		250,759,958
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

Retiree Health Insurance Premium Account

Calendar Year		Net Position								
		Additions		Deductions		Net Change		Beginning of Year	End of Year	
2006	\$	3,205,104	\$	2,299,226	\$	905,878	\$	6,110,328	\$	7,016,206
2007		2,837,508		2,034,399		803,109		7,016,206		7,819,315
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

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

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

Fiscal Year	Service Benefits	Disability Benefits		Retirement Benefit Totals	Death Benefits	Refunds ¹		Total
		Duty	Non-Duty			Normal	Death	
2006	\$ 2,264,988,154	\$ 11,371,883	\$ 89,310,558	\$ 2,365,670,595	\$ 5,957,975	\$ 33,172,837	\$ N/A	\$ 2,404,801,407
2007	2,462,885,953	12,113,128	93,493,033	2,568,492,114	6,096,828	41,222,535	N/A	2,615,811,477
2008	2,646,746,186	13,363,139	96,763,796	2,756,873,121	11,432,179	50,660,781	N/A	2,818,966,081
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

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

**Schedule of Earnings and Crediting
at December 31¹:**

Calendar Year	Tier One Earnings/(Loss) Available for Crediting	Credited		Variable Earnings/ (Loss) Credited	Individual Account Program ²
		Tier One	Tier Two		
2006	15.57 %	8.00 %	15.45 %	15.61 %	14.98 %
2007	10.22	7.97	9.47	1.75	9.46
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 ³	25.74 ⁴	15.59
2014	7.24	7.75	7.24	4.29	7.05
2015	1.87	7.75	1.87	(1.61)	1.85

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

²The Individual Account Program began in 2004 and was remediated in 2006 to reflect annual earnings credited for 2005

³Earnings rate includes allocation from settlement of *Murray v. PERB* litigation.

⁴Earnings rate includes allocation from settlement of *White, et al. v. PERB* litigation.

**Schedule of Average OPEB Benefits for Retirement Health Insurance Account¹
For the Year Ended June 30, 2016:**

Years Credited Service	8+
Average Monthly Benefit	\$60.00
Final Average Salary	N/A
Number of Active Retirees	45,060

**Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account¹
For the Year Ended June 30, 2016:**

	Years Credited Service						Total
	8 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	
Average Monthly Benefit	\$ 163	\$ 196	\$ 229	\$ 262	\$ 294	\$ 327	\$ 300
Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of Active Retirees	4	41	97	142	276	678	1,238

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

Oregon Public Employees Retirement System

Schedule of Average Defined Benefit Pension Payments

Retirement Effective Dates July 1, 2006 to June 30, 2016	Years Credited Service							Total
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
2007 Average Monthly Benefit	\$795	\$929	\$1,335	\$1,982	\$2,847	\$4,318	\$4,811	\$2,606
Final Average Salary	\$3,240	\$3,413	\$3,716	\$4,278	\$4,657	\$5,161	\$5,433	\$4,389
Number of Active Retirees	227	573	620	729	598	1,002	343	4,092
2008 Average Monthly Benefit	\$750	\$934	\$1,386	\$1,814	\$2,671	\$4,238	\$5,030	\$2,638
Final Average Salary	\$2,951	\$3,281	\$3,857	\$4,222	\$4,505	\$5,175	\$5,618	\$4,413
Number of Active Retirees	206	552	647	835	656	1,122	423	4,441
2009 Average Monthly Benefit	\$771	\$973	\$1,322	\$1,884	\$2,659	\$4,125	\$5,202	\$2,658
Final Average Salary	\$3,416	\$3,458	\$3,830	\$4,368	\$4,747	\$5,274	\$5,756	\$4,559
Number of Active Retirees	216	574	623	761	694	1,018	511	4,397
2010 Average Monthly Benefit	\$681	\$1,019	\$1,281	\$1,887	\$2,607	\$4,091	\$5,138	\$2,619
Final Average Salary	\$3,333	\$3,696	\$3,905	\$4,512	\$5,000	\$5,448	\$5,817	\$4,717
Number of Active Retirees	236	635	696	914	882	1,143	556	5,062
2011 Average Monthly Benefit	\$652	\$975	\$1,355	\$1,827	\$2,568	\$3,915	\$5,354	\$2,584
Final Average Salary	\$3,386	\$3,669	\$4,101	\$4,630	\$5,189	\$5,790	\$6,188	\$4,898
Number of Active Retirees	292	773	951	1,075	1,130	1,245	776	6,242
2012 Average Monthly Benefit	\$633	\$992	\$1,378	\$1,800	\$2,502	\$3,748	\$5,166	\$2,495
Final Average Salary	\$3,503	\$3,901	\$4,368	\$4,878	\$5,675	\$6,274	\$6,988	\$5,275
Number of Active Retirees	325	893	1,033	1,056	1,240	1,209	865	6,621
2013 Average Monthly Benefit	\$697	\$1,030	\$1,419	\$1,871	\$2,489	\$3,748	\$5,323	\$2,505
Final Average Salary	\$3,537	\$3,820	\$4,413	\$5,034	\$5,923	\$6,647	\$6,985	\$5,378
Number of Active Retirees	378	961	1,119	1,122	1,347	1,153	928	7,008
2014 Average Monthly Benefit	\$737	\$1,029	\$1,352	\$1,738	\$2,416	\$3,490	\$5,089	\$2,369
Final Average Salary	\$3,575	\$3,634	\$4,340	\$5,021	\$5,894	\$6,397	\$6,980	\$5,287
Number of Active Retirees	399	1,039	1,153	1,233	1,449	1,237	934	7,444
2015 Average Monthly Benefit	\$621	\$790	\$1,208	\$1,705	\$2,270	\$3,364	\$5,004	\$2,178
Final Average Salary	\$3,852	\$3,804	\$4,491	\$5,177	\$5,788	\$6,546	\$7,365	\$5,379
Number of Active Retirees	312	849	1,039	1,105	1,153	1,094	635	6,187
2016 Average Monthly Benefit	\$695	\$842	\$1,207	\$1,700	\$2,261	\$3,328	\$5,034	\$2,282
Final Average Salary	\$3,600	\$3,863	\$4,516	\$5,294	\$5,859	\$6,782	\$7,417	\$5,543
Number of Active Retirees	324	840	989	1,112	1,208	1,254	781	6,508

Oregon Public Employees Retirement System

Schedule of Benefit Recipients by Benefit Type For the Year Ended June 30, 2016

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	18,232	14,537	88	152	3,023	432	1,767	5,281	4,534	1,103	787	2,504	1,819	437
501-1000	20,005	16,407	120	626	2,225	627	2,325	6,549	5,915	1,902	976	1,121	958	259
1001-1500	16,921	14,097	85	659	1,593	487	1,771	5,270	5,543	1,807	766	774	768	222
1501-2000	14,145	11,864	77	607	1,201	396	1,484	4,038	4,921	1,604	595	633	685	185
2001-2500	12,115	10,425	76	480	856	278	1,204	3,371	4,201	1,452	473	539	731	144
2501-3000	10,099	8,860	56	373	601	209	1,031	2,775	3,614	1,218	346	429	561	125
3001-3500	8,688	7,801	57	220	503	107	846	2,378	3,222	1,205	335	263	351	88
3501-4000	7,522	6,941	36	159	335	51	703	1,977	3,110	1,073	258	149	200	52
4001-4500	6,719	6,277	25	113	270	34	521	1,781	2,875	1,047	256	89	109	41
4501-5000	5,822	5,521	18	59	207	17	452	1,461	2,648	910	204	41	81	25
5001-5500	4,667	4,434	13	40	168	12	355	1,172	2,141	768	141	22	53	15
5501-6000	3,367	3,199	8	26	123	11	237	876	1,494	607	111	15	21	6
6000+	8,133	7,745	15	42	317	14	440	1,649	4,002	1,694	225	33	73	17
Totals	136,435	118,108	674	3,556	11,422	2,675	13,136	38,578	48,220	16,390	5,473	6,612	6,410	1,616

* 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:

	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	40,638	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:

	2011	2012	2013	2014	2015	2016
State Agencies	46,739	45,953	45,019	45,774	47,620	47,868
School Districts	75,915	67,172	63,297	64,824	66,434	68,648
Political Subdivisions	60,695	56,656	54,943	54,376	54,536	55,160
Inactive Members	41,832	42,286	44,819	43,646	44,786	45,925
Total Non-Retired	225,181	212,067	208,078	208,620	213,376	217,601
Retired Members and Beneficiaries	114,252	119,346	123,827	129,138	132,506	136,435
Total Membership	339,433	331,413	331,905	337,758	345,882	354,036
Administrative Expense ¹	\$38,594,620	\$42,254,365	\$42,792,995	\$40,395,370	\$45,791,942	\$52,775,646
Pension Roll (one month)	\$270,111,478	\$284,236,712	\$299,997,147	\$303,834,899	\$317,090,746	\$337,405,252

¹ Fiduciary Funds only.

Oregon Public Employees Retirement System

Schedule of Principal Participating Employers

Current Fiscal Year and Nine Years Ago

	2016			2007		
	Number of	Rank	Percent of	Number of	Rank	Percent of
	Current Employees		Total System	Current Employees		Total System
State of Oregon	47,868	1	27.88 %	42,906	1	26.08 %
Portland Public Schools	5,685	2	3.31	5,554	3	3.38
Salem-Keizer Public Schools	4,949	3	2.88	4,660	4	2.83
Multnomah County	4,918	4	2.86	4,428	5	2.69
City of Portland	4,759	5	2.77	4,001	7	2.43
Oregon Health & Science University	4,554	6	2.65	5,781	2	3.51
Beaverton School District	3,905	7	2.27	4,243	6	2.58
Portland Community College	2,469	8	1.44	2,309	8	1.4
Hillsboro School District 1J	2,370	9	1.38	2,059	10	1.25
Clackamas County	1,950	10	1.14	—		—
Eugene School District 4J	—		—	2,136	9	1.3
All Others*	88,249		51.40	86,471		52.55
Total	171,676		100.00 %	164,548		100.00 %

* “All Others” consisted of:

Counties	10,864	6.33 %	13,369	8.12 %
Municipalities	12,469	7.26	12,350	7.51
School Districts	50,991	29.70	47,262	28.72
Community Colleges	5,690	3.31	6,250	3.80
Other Political Subdivisions	8,235	4.80	7,240	4.40
Total All Others	88,249	51.40 %	86,471	52.55 %

Schedule of Participating Employers (906)

State (107)

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
 Board of Psychologist Examiners
 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 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
 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 (487)

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 District

Oregon Public Employees Retirement System

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

Oregon Public Employees Retirement System

King City, City of	Mid-Columbia Center for Living	Nyssa, City of
Klamath County	Mid-Columbia Fire And Rescue	Oak Lodge Sanitary District
Klamath County Emergency Communications District	Mill City RFPD	Oak Lodge Water District
Klamath County Fire District 1	Mill City, City of	Oakland, City of
Klamath Falls, City of	Millersburg, City of	Oakridge, City of
Klamath Housing Authority	Millington RFPD	Ochoco Irrigation District
Klamath Vector Control District	Milton-Freewater, City of	Odell Sanitary District
Knappa Svensen Burnside RFPD	Milwaukie, City of	Ontario, City of
La Grande Rural Fire Protection District	Mist-Birkenfeld RFPD	Oregon Cascades West COG
La Grande, City of	Mohawk Valley RFD	Oregon City, City of
La Pine RFPD	Molalla RFPD 73	Oregon Community College Association
Lafayette, City of	Molalla, City of	Oregon Consortium, The
Lake Chinook Fire And Rescue District	Monmouth, City of	Oregon Health & Science University
Lake County	Monroe RFPD	Oregon Municipal Electric Utilities Association
Lake County Library District	Monroe, City of	Oregon School Boards Association
Lake Oswego, City of	Moro, City of	Oregon Trail Library District
Lakeside Water District	Mosier Fire District	Owyhee Irrigation District
Lakeside, City of	Mt. Angel Fire District	Parkdale RFPD
Lakeview, Town of	Mt. Angel, City of	Pendleton, City of
Lane Council of Governments	Mt. Vernon, City of	Philomath Fire and Rescue
Lane County	Mulino Water District 23	Philomath, City of
Lane Fire Authority	Multnomah County	Phoenix, City of
League of Oregon Cities	Multnomah County Drainage District 1	Pilot Rock, City of
Lebanon Aquatic District	Multnomah County RFPD 14	Pleasant Hill RFPD
Lebanon RFPD	Myrtle Creek, City of	Polk County
Lebanon, City of	Myrtle Point, City of	Polk County Fire District 1
Lincoln City, City of	Nehalem Bay Fire and Rescue	Polk Soil and Water Conservation District
Lincoln County	Nehalem Bay Health District	Port of Astoria
Linn County	Nehalem Bay Wastewater Agency	Port of Cascade Locks
Linn-Benton Housing Authority	Nesika Beach - Ophir Water District	Port of Coos Bay, International
Local Government Personnel Institute	Neskowin Regional Sanitary Authority	Port of Garibaldi
Lowell, City of	Neskowin Regional Water District	Port of Hood River
Lyons RFPD	Nestucca RFPD	Port of Newport
Lyons, City of	Netarts Water District	Port of Portland
Madras, City of	Netarts-Oceanside RFPD	Port of St. Helens
Malheur County	Netarts-Oceanside Sanitary District	Port of The Dalles
Malin, City of	Newberg, City of	Port of Tillamook Bay
Manzanita, City of	Newport, City of	Port of Umatilla
Mapleton Water District	North Bend City Housing Authority	Port Orford Public Library
Marion County	North Bend, City of	Port Orford, City of
Marion County Fire District 1	North Central Public Health District	Portland Development Commission
Marion County Housing Authority	North Clackamas County Water Commission	Portland, City of
Maupin, City of	North Douglas County Fire and EMS	Powers, City of
McKenzie RFPD	North Lincoln Fire & Rescue District 1	Prairie City, City of
McMinnville Water and Light Department	North Marion County Communications	Prineville, City of
McMinnville, City of	North Morrow Vector Control District	Rainbow Water District
Medford Irrigation District	North Plains, City of	Rainier Cemetery District
Medford Water Commission	North Powder, City of	Rainier, City of
Medford, City of	North Wasco County Parks & Recreation District	Redmond Area Park and Recreation District
Merrill, City of	Northeast Oregon Housing Authority	Redmond Fire and Rescue
Metolius, City of	Northern Oregon Corrections	Redmond, City of
METRO	Northwest Senior and Disability Services	Reedsport, City of
Metropolitan Area Communication Commission	Nyssa Road Assessment District 2	Riddle, City of

Oregon Public Employees Retirement System

Rockaway Beach, City of	Talent Irrigation District	Weston, City of
Rockwood Water PUD	Talent, City of	Wheeler, City of
Rogue River RFPD	Tangent RFPD	Wiard Memorial Park District
Rogue River Valley Irrigation District	Tigard, City of	Wickiup Water District
Rogue River, City of	Tillamook County Emergency	Willamina, City of
Roseburg Urban Sanitary Authority	Communications District	Wilsonville, City of
Roseburg, City of	Tillamook County Soil and Water	Winchester Bay Sanitary District
Rural Road Assessment District 3	Conservation District	Winston, City of
Salem Housing Authority	Tillamook Fire District	Winston-Dillard Fire District
Salem, City of	Tillamook People's Utility District	Winston-Dillard Water District
Salmon Harbor and Douglas County	Tillamook, City of	Wood Village, City of
Sandy RFPD 72	Toledo, City of	Woodburn Fire District
Sandy, City of	Tri-City Water and Sanitary Authority	Woodburn, City of
Santa Clara RFPD	Tri-County Cooperative Weed Management	Wy'East Fire District
Scappoose Public Library District	Area	Yachats RFPD
Scappoose RFPD	Troutdale, City of	Yachats, City of
Scappoose, City of	Tualatin Valley Fire and Rescue	Yamhill Communications Agency
Scio RFPD	Tualatin Valley Irrigation District	Yamhill County
Seal Rock RFPD	Tualatin Valley Water District	Yamhill Fire Protection District
Seal Rock Water District	Tualatin, City of	Yamhill, City of
Shady Cove, City of	Turner, City of	Yoncolla, City of
Sheridan Fire District	Umatilla County	
Sheridan, City of	Umatilla County Soil and Water District	Community Colleges (17)
Sherman County	Umatilla County Special Library District	Blue Mountain Community College
Sherwood, City of	Umatilla RFPD 7-405	Central Oregon Community College
Siletz Rural Fire Protection District	Umatilla, City of	Chemeketa Community College
Silver Falls Library District	Umatilla-Morrow Radio and Data District	Clackamas Community College
Silverton RFPD 2	Vale, City of	Clatsop Community College
Silverton, City of	Valley View Cemetery Maintenance District	Columbia Gorge Community College
Sisters and Camp Sherman RFPD	Veneta, City of	Klamath Community College
Sisters, City of	Vernonia RFPD	Lane Community College
Siuslaw Public Library District	Vernonia, City of	Linn-Benton Community College
Siuslaw RFPD 1	Waldport, City of	Mt. Hood Community College
South Fork Water Board	Wallowa County	Oregon Coast Community College
South Lane County Fire and Rescue	Wallowa, City of	Portland Community College
South Suburban Sanitary District	Warrenton, City of	Rogue Community College
Southwest Lincoln County Water District	Wasco County	Southwestern Oregon Community College
Southwest Polk County RFPD	Wasco County Soil and Water Conservation	Tillamook Bay Community College
Springfield Utility Board	District	Treasure Valley Community College
Springfield, City of	Washington County	Umpqua Community College
St. Helens, City of	Washington County Consolidated	
Stanfield Fire District 7-402	Communications Agency	School Districts (295)
Stanfield, City of	Washington County Fire District 2	Alliance Charter Academy
Stayton RFPD	West Extension Irrigation District	Arco Iris Spanish Immersion Charter School
Stayton, City of	West Linn, City of	Armadillo Technical Institute
Sublimity RFPD	West Multnomah Soil and Water Conservation	Baker CSD 16J
Suburban East Salem Water District	District	Baker CSD 30 J
Sunrise Water Authority	West Side Fire District	Baker CSD 5J
Sunriver Service District	West Slope Water District	Baker CSD 61
Sutherlin Water Control District	West Valley Fire District	Baker Web Academy
Sutherlin, City of	West Valley Housing Authority	Ballston Community School
Sweet Home Cemetery Maintenance District	Western Lane Ambulance District	Beaverton School District 48J
Sweet Home Fire and Ambulance District	Westfir, City of	Bend International School
Sweet Home, City of	Weston Cemetery District	Bennett Pearson Academy Charter School

Oregon Public Employees Retirement System

Benton CSD 17J	Douglas CSD 15	Jefferson CSD 4
Benton CSD 1J	Douglas CSD 19	Jefferson CSD 41
Benton CSD 509J	Douglas CSD 21	Jefferson CSD 509J
Benton CSD 7J	Douglas CSD 22	Jefferson CSD 8
Cascade Heights Public Charter School	Douglas CSD 32	Jordan Valley School District 3
Center For Advanced Learning	Douglas CSD 34	Josephine County UJ School District
Central Curry School District 1	Douglas CSD 4	Josephine CSD 7
City View Charter School	Douglas CSD 70	Kairos PDX
Clackamas Charter Alliance 1	Douglas CSD 77	Kings Valley Charter School
Clackamas Charter Alliance 2	EagleRidge High School	Klamath CSD CU
Clackamas County ESD	Eddyville Charter School	Klamath Falls City Schools
Clackamas CSD 108	Estacada Web and Early College Academy 1	Knova Learning Oregon
Clackamas CSD 115	Forest Grove Community School	Lake County ESD
Clackamas CSD 12	Fossil School District 21J	Lake CSD 11C
Clackamas CSD 3	Four Rivers Community School	Lake CSD 14
Clackamas CSD 35	Gilliam CSD 3	Lake CSD 18
Clackamas CSD 46	Grant County ESD	Lake CSD 21
Clackamas CSD 53	Grant CSD 16J	Lake CSD 7
Clackamas CSD 62	Grant CSD 17	Lane County ESD
Clackamas CSD 7J	Grant CSD 4	Lane CSD 1
Clackamas CSD 86	Grant CSD 8	Lane CSD 19
Clatskanie School District 6J	Grant School District 3	Lane CSD 28J
Clatsop CSD 10	Greater Albany Public Schools 8J	Lane CSD 32
Clatsop CSD 1C	Gresham Barlow Web Academy Public	Lane CSD 40
Clatsop CSD 30	Charter School	Lane CSD 45J3
Clatsop CSD 4	Harney CSD 10	Lane CSD 4J
Clatsop CSD 8	Harney CSD 13	Lane CSD 52
Coburg Community Charter School	Harney CSD 16	Lane CSD 66
Columbia CSD 13	Harney CSD 28	Lane CSD 68
Columbia CSD 47 J	Harney CSD 3	Lane CSD 69
Columbia CSD 502	Harney CSD 4	Lane CSD 71
Columbia Gorge Education Service District	Harney CSD 5	Lane CSD 76
Condon Admin. School District 25J	Harney CSD 7	Lane CSD 79J
Coos CSD 13	Harney CSD UH1J	Lane CSD 90
Coos CSD 31	Harney ESD Region 17	Lane CSD 97J
Coos CSD 41	Harrisburg School District 7	Le Monde Immersion Charter School
Coos CSD 54	High Desert Education Service District	Lewis and Clark Montessori Charter School
Coos CSD 8	Hillsboro School District 1J	Lincoln CSD
Coos CSD 9	Hood River CSD	Linn Benton Lincoln ESD
Crater Lake Charter Academy	Hope Chinese Charter School	Linn CSD 129J
Crook CSD	Howard Street Charter School, Inc.	Linn CSD 55
Curry CSD 17C	Inavale Community Partners	Linn CSD 552C
Curry CSD 2CJ	Insight School Of Oregon Charter	Linn CSD 9
Dallas Community School	Ione School District	Linn CSD 95C
Dayton School District 8	Jackson CSD 35	Logos Public Charter School
Deschutes CSD 1	Jackson CSD 4	Lourdes Charter School
Deschutes CSD 2J	Jackson CSD 5	Luckiamute Valley Charter School
Deschutes CSD 6	Jackson CSD 549C	Madrone Trail Public Charter School
Douglas County ESD	Jackson CSD 59	Malheur CSD 12
Douglas CSD 1	Jackson CSD 6	Malheur CSD 26C
Douglas CSD 105	Jackson CSD 9	Malheur CSD 29
Douglas CSD 116	Jackson CSD 91	Malheur CSD 61
Douglas CSD 12	Jackson CSD 94	Malheur CSD 66
Douglas CSD 130	Jefferson County ESD	Malheur CSD 81

Oregon Public Employees Retirement System

Malheur CSD 84	Sand Ridge Charter School	Washington CSD 15
Malheur CSD 8C	Sauvie Island Academy	Washington CSD 23J
Malheur ESD Region 14	Scappoose School District 1J	Washington CSD 511JT
Marion CSD 1	Self-Enhancement Inc.	Washington CSD 88J
Marion CSD 103C	Sheridan AllPrep Academy	West Lane Technical Learning Center
Marion CSD 14CJ	Sheridan Japanese School Foundation	Wheeler CSD 1
Marion CSD 15	Sherman CSD	Wheeler CSD 55U
Marion CSD 24J	Sherwood Charter School	Willamette ESD
Marion CSD 45	Siletz Valley Early College Academy	Woodland Charter School
Marion CSD 4J	Siletz Valley School	Yamhill CSD 1
Marion CSD 5	Sisters Web and Early College Academy #3	Yamhill CSD 29JT
Marion CSD 91	South Coast ESD Region 7	Yamhill CSD 30-44-63J
Mastery Learning Institute	South Columbia Family School	Yamhill CSD 40
Molalla River Academy	South Harney School District 33	Yamhill CSD 48J
Morrow CSD	South Wasco County School District 1	Yamhill CSD 4J
Mosier Community School	Southern Oregon ESD	
Mosier Middle School	Southwest Charter School	
Mountain View Academy	Springfield Academy Of Arts & Academics	
Multisensory Institute Teaching Children	Springwater Environmental Sciences School	
Multisensory Learning Academy	Sunny Wolf Charter School	
Multnomah County ESD	Sweet Home Charter School	
Multnomah CSD 1	The Emerson School	
Multnomah CSD 10	The Ivy School	
Multnomah CSD 28-302 JT	The Lighthouse School	
Multnomah CSD 3	The Valley School of Southern Oregon	
Multnomah CSD 39	The Village School	
Multnomah CSD 51JT	Three Rivers Charter School	
Multnomah CSD 7	Tillamook CSD 101	
Multnomah CSD R-40	Tillamook CSD 56	
Nixyaawii Community School	Tillamook CSD 9	
North Central ESD	Trillium Charter School	
North Powder School District	Umatilla County Administrative School	
North Santiam School District 29J	District 1R	
North Wasco CSD 21	Umatilla CSD 16R	
Northwest Regional ESD	Umatilla CSD 29RJ	
Opal School	Umatilla CSD 2R	
Oregon Building Congress Academy for Architecture, Construction and Engineering	Umatilla CSD 5	
Oregon Connections Academy	Umatilla CSD 61R	
Oregon Virtual Academy	Umatilla CSD 6R	
Oregon Virtual Education East	Umatilla CSD 7	
Oregon Virtual Education West	Umatilla CSD 80R	
Personalized Learning, Inc.	Umatilla CSD 8R	
Phoenix School, The	Umatilla Morrow ESD	
Polk CSD 13J	Union CSD 1	
Polk CSD 2	Union CSD 11	
Polk CSD 21	Union CSD 15	
Polk CSD 57	Union CSD 23	
Portland Village School	Union CSD 5	
Powell Butte Community Charter School	Wallowa County Region 18 ESD	
Renaissance Public Academy	Wallowa CSD 12	
Ridgeline Montessori Public Charter School	Wallowa CSD 21	
River's Edge Academy Charter School	Wallowa CSD 54	
Sage Community School	Wallowa CSD 6	
	Wasco CSD 29	
	Washington CSD 13	

This Fiscal Year 2016 CAFR is dedicated to Rick Howitt, who produced Oregon PERS CAFRs that received GFOA Certificates of Achievement for 25 consecutive years.

