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# Oregon Public Employees <br> Retirement System An Agency of the State of Oregon 

# Comprehensive Annual Financial Report <br> For the Fiscal Year Ended June 30, 2015 

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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Mailing Address:
P.O. Box 23700

Tigard, OR 97281-3700 (503) 598-7377

TTY (503) 603-7766
http://oregon.gov/PERS/

December 1, 2015
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, 2015. 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 30,2015 , PERS provided services to 910 employers and to nearly 346,000 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 17.

## 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

In 2012, PERS developed an outcome-based management system to improve its operational performance and organizational alignment. The system uses a process-based orientation that integrates problem solving and decision making with active engagement from the front-line staff that perform the daily work.

The management system was reevaluated in 2015, where it was confirmed that the PERS' Mission remains relevant as serving 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. Organization Management and Development,
2. Member Services and Communications,
3. Data Reliability, and
4. Information Technology

For each of the four strategic priorities, PERS will use its existing strategic and operational planning function to prioritize and allocate resources for each of the strategies identified. 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 and outcome measures to monitor and document our progress. Quarterly target review meetings are held to review our progress and identify areas for improvement.

## Customer Satisfaction Survey

Our member and employer customer satisfaction surveys conducted in fiscal year 2015 show overall improvement from 2014, continuing the positive trend of year-to-year improvement over the ten-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."

## Impact of Legislation

On April 30, 2015, the Oregon Supreme Court declared Senate Bills 822 and 861 unconstitutional in so far as they affect retirement benefits earned before May 6, 2013.

Senate Bill 822 was enacted during the 2013 Oregon regular legislative session to lower the cap on the cost-of-living adjustment (COLA) from 2 percent to 1.5 percent, and eliminate the tax remedy benefit for recipients who do not pay Oregon state income taxes because they do not reside in Oregon. The tax remedy benefit portion of Senate Bill 822 was upheld by the Oregon Supreme Court. Senate Bill 861 was enacted during a special legislative session in September 2013, and modified subsequent yearly COLAs for all PERS benefit recipients.

The decision reduced PERS' funded status and negated a large portion of the cost savings for PERS employers that were factored into 2015-2017 contribution rates. The potential financial impact of this decision increases the present value of future benefits by $\$ 5.1$ billion. PERS has executed a project to restore COLA payments to benefit recipients and enhance its systems to implement the new COLA allocation going forward.

## Changes in Accounting Standards

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 establishes requirements for defined benefit pensions that are not within the scope of GASB Statement No. 68, Accounting and Financial Reporting for Pensions (Statement 68), as well as for the assets accumulated for purposes of providing those pensions. In addition, it establishes requirements for defined contribution pensions that are not within the scope of Statement 68, also amends certain provisions of GASB Statement No. 67, Financial Reporting for Pension Plans, and Statement 68 for pension plans and pensions that are within their respective scopes.

While this Statement is effective for the fiscal year ending June 30, 2016, PERS has been compliant with the provisions of GASB Statement No. 73 since implementing GASB Statement No. 67 in 2014.

## 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 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, 2014 actuarial valuation, PERS has a funded ratio of 84 percent for the defined benefit plan it administers, including employer side accounts, and 76 percent excluding employer side accounts (see page 97).

## 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, 20 percent private equity, 20 percent debt securities, 12.5 percent real estate and 10 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 longterm 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 2015 with a rate of return of 4.3 percent. This compares with a rate of return of 16.6 percent for fiscal year 2014. The portfolio's trailing 10 -year return was 7.34 percent, 0.41 percent lower than the System's current assumed rate of 7.75 percent. Descriptions of specific OIC policies regarding diversification, performance objectives, fees, and asset allocation are found on pages 74 through 79.

## 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, 2014. 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 24 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 2015 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 thirteenth year the PPCC has offered the award to public retirement systems and the twelfth 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, 2015, the three Board members representing business management, pension management, or investing are Krystal Gema, John Thomas (board chair), and Rhoni Wiswall. 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 organiza-tions-universities and academic health centers-including over 25 years as a Chief Financial Officer (CFO). Furnstahl is executive vice president and CFO 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 CFO for UCSF Stanford Health Care; vice president and CFO 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.

## Rhoni Wiswall

Rhoni Wiswall is a managing director at Neuberger Berman (NB), a private, independent, employee-controlled investment management firm. Prior to joining NB, she spent $4-1 / 2$ years at Crestline Investors as head of Consultant Relations. She spent 23 years with Invesco, where her positions included partner, managing director, and senior account manager. She is a member of the Board of Trustees for the American Cancer Society-Great West Region, Bridge Meadows, St. Andrew’s Nativity School, and Meals On Wheels. Ms. Wiswall serves on the President's Advisory Council at Portland Community College and is a member of the Oregon Community Foundation Metro Leadership Council. She received a B.A. in business administration from George Fox University.

## Public Employees Retirement System Organizational Chart

As of 12/1/2014


## 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 70.

## Government Finance Officers Association

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

Presented to
Oregon Public Employees Retirement System

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

$$
\text { June 30, } 2014
$$



Executive Director/CEO

# Public Pension Coordinating Council 

# Public Pension Standards Award <br> For Funding and Administration 2015 

Presented to

# Oregon Public Employees Retirement System 

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

Presented by the Public Pension Coordinating Council, a confederation of
National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)


Alan H. Winkle
Program Administrator

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## Financial Section

## Oregon Public Employees Retirement System

Certified

# Independent Auditor's Report 

To the Honorable Kate Brown<br>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, 2015, 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, 2015, 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 10 to the financial statements, the total pension liability for the Defined Benefit Pension Plan, based on the actuarial valuation as of December 31, 2013, rolled forward to June 30, 2015, exceeded the plan's fiduciary net position by $\$ 5.7$ billion. The actuarial valuation is very sensitive to the underlying assumptions, including a discount rate of 7.75 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, 2014, 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 $\$ 72.5$ million for the Retirement Health Insurance Account plan, and $\$ 63.3$ 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, 2014, from which such partial information was derived.

We have previously audited the System's 2014 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 29, 2014. In our opinion, the partial comparative information presented herein as of and for the fiscal year ended June 30, 2014, 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 defined benefit pension plan employer contributions, the schedule of investment returns defined benefit pension plan, 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, 2015 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.

Macias Gin $\dot{\epsilon}$ O'Comell $L \mathbb{P}$
Sacramento, California
December 1, 2015

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## MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents management's discussion and analysis of the Oregon Public Employees Retirement System's (PERS or the System) financial performance during the year ended June 30, 2015. 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. It should also be read in conjunction with the basic financial statements of PERS, 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, including an account-based benefit program, 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, 2015. It also summarizes the combined changes in net position restricted for pension and other postemployment benefits, 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 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, 2015, 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 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, the Individual Account Program, 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, 2015, along with comparative total information as of and for the year ended June

30, 2014. 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, 2015, along with comparative total information as of and for the year ended June 30, 2014. These financial statements reflect the net position, changes in net position, and cash flows resulting from PERS business-type activities.

## Notes to the 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 accounts receivable and payable.
Note 4 - provides information on cash and cash equivalents. The note also describes investments, including 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 PERS' Net Pension Liability.
Note 11 - provides information about the funded status of other postemployment benefit plans administered by PERS.

Note 12 - provides information about important events impacting PERS subsequent to June 30, 2015.

## 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:

## Oregon Public Employees Retirement System

- The Schedule of Changes in Net Pension Liability/ (Asset) and Related Ratios, page 61, 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-employee payroll, and net pension liability as a percentage of covered-employee payroll. This required 10 -year trend schedule will disclose future years prospectively.
- The Schedule of Defined Benefit Employer Contributions, page 62 , 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 contribution as a percentage of employee covered payroll.
- The Schedule of Investment Returns - Defined Benefit Pension Plan, page 61, 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 Schedules of Funding Progress - OPEB Plans, page 64, 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 65, 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 66, shows earned revenues and expenses over the past five years.


## Other Supplementary Information

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

- The Schedule of Plan Net Position and Schedule of Changes in Plan Net Position - Defined Benefit Pension Plan, pages 67 and 68 , display the components of the defined benefit pension plan.
- The Schedule of Administrative Expenses and Schedule of Payments to Consultants and Contractors on page 69 show the costs of managing the System.
- The Summary of Investment Fees, Commissions, and Expenses on page 70 provides the detail of investmentrelated 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 2015, with $\$ 73,865.1$ million restricted for pension, Oregon Public Service Retirement Plan Individual Account Program (IAP), other postemployment benefits, and deferred compensation benefits.
- Fiduciary net position increased by $\$ 137.0$ million, or 0.2 percent, during the fiscal year, as benefit payments


## TABLE 1

## FIDUCIARY NET POSITION, PENSION (in thousands) As of June 30:

|  | Defined Benefit Pension Plan |  |  |  | Individual Account Program |  |  |  | Deferred Compensation Plan |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 2014 |  | 2015 |  | 2014 |  | 2015 |  | 2014 |  |
| Cash and Receivables | \$ | 4,593,950 | \$ | 5,064,957 | \$ | 472,191 | \$ | 476,028 | \$ | 63,969 | \$ | 64,939 |
| Investments at Fair Value |  | 62,663,003 |  | 62,656,313 |  | 6,719,214 |  | 6,183,653 |  | 1,476,789 |  | 1,413,130 |
| Securities Lending Collateral |  | 1,502,082 |  | 1,979,910 |  | 163,078 |  | 198,128 |  | 11 |  | 16 |
| Other |  | 40,342 |  | 36,937 |  | 311 |  | 5,827 |  | - |  | - |
| Total Assets |  | 68,799,377 |  | 69,738,117 |  | 7,354,794 |  | 6,863,636 |  | 1,540,769 |  | 1,478,085 |
| Investment Purchases |  | 2,258,427 |  | 2,240,478 |  | 208,607 |  | 192,525 |  | 578 |  | 692 |
| Securities Lending Payable |  | 1,504,104 |  | 1,981,850 |  | 163,297 |  | 198,321 |  | 11 |  | 16 |
| Other Payables |  | 113,220 |  | 114,296 |  | 12,950 |  | 15,673 |  | 292 |  | 707 |
| Total Liabilities |  | 3,875,751 |  | 4,336,624 |  | 384,854 |  | 406,519 |  | 881 |  | 1,415 |
| Total Net Position | \$ | 64,923,626 | \$ | 65,401,493 | \$ | 6,969,940 | \$ | 6,457,117 | \$ | 1,539,888 | \$ | 1,476,670 |

exceeded contributions and the lower investment returns.

- PERS' funding objective is to meet long-term benefit obligations. As of December 31, 2014, the date of the latest actuarial funding valuation, the funded ratio of the defined benefit pension plan, including side accounts, was 84 percent. In general, this means that for every dollar of pension benefits due, PERS has approximately $\$ 0.84$ available for payment.
- Revenues (additions to fiduciary net position), which include member and employer contributions of $\$ 1,860.8$ million and net income from investment activities totaling $\$ 2,702.0$ million, fell 64.1 percent to $\$ 4,566.7$ million, for fiscal year 2015, compared to $\$ 12,728.7$ in fiscal year 2014.
- Expenses (deductions from fiduciary net position) increased slightly to $\$ 4,429.8$ million, or 1.5 percent, during the fiscal year from $\$ 4,363.1$ million in fiscal year 2014.


## FIDUCIARY NET POSITION

Table 1 on page 18 and Table 2 below show condensed comparative summaries of Fiduciary Net Position and demonstrate that the pension trust funds are primarily focused on investments and net position (reserves).

- Volatile financial markets produced lower returns on PERS investments than those of the previous fiscal year, even as benefit payments continued to grow. The net position of the defined benefit pension plan decreased approximately $\$ 477.9$ million, or 0.7 percent, during the year ended June 30, 2015.
- The net position of the OPSRP IAP increased approximately $\$ 512.8$ million, or 7.9 percent, during the year ended June 30, 2015, as member contributions and investment income outweighed benefit payments.
- The net position of the deferred compensation plan increased approximately $\$ 63.2$ million, or 4.3 percent, dur-
ing the year ended June 30, 2015, due to participant contributions and investment income exceeding withdrawals.
- The net position of the Retirement Health Insurance Account increased approximately $\$ 36.1$ million, or 9.3 percent, during the year ended June 30, 2015, as employer contributions more than offset increases in healthcare premium subsidies.
- The net position of the Retiree Health Insurance Premium Account increased approximately $\$ 2.7$ million, or 45.3 percent, during the year ended June 30, 2015, as higher employer contributions substantially offset increases in healthcare premium subsidies.


## 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 increased $\$ 208.0$ million, or 22.7 percent, in fiscal year 2015. This increase was primarily due to the receipt of $\$ 175$ million in Unfunded Actuarial Liability (UAL) side account payments, as well as an increase in PERS-covered salaries in fiscal year 2015.
- Employer contributions to the Retirement Health Insurance Account increased to $\$ 53.6$ million in fiscal year 2015 compared to $\$ 48.3$ million in fiscal year 2014, an 11.2 percent increase. This was due to an increase in PERScovered salaries.
- Employer contributions to the Retiree Health Insurance Premium Account were $\$ 6.9$ million in fiscal year 2015, compared to $\$ 6.2$ million in fiscal year 2014, an increase of $\$ 737$ thousand, or 12.0 percent, due to an increase in PERS-covered salaries.

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

|  | Retirement Health Insurance Account |  |  |  | Retiree Health Insurance Premium Account |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 2014 |  | 2015 |  | 2014 |  |
| Cash and Receivables | \$ | 33,165 | \$ | 31,774 | \$ | 1,793 | \$ | 1,287 |
| Investments at Fair Value |  | 405,091 |  | 369,203 |  | 7,223 |  | 5,307 |
| Securities Lending Collateral |  | 9,845 |  | 11,843 |  | 179 |  | 175 |
| Other |  | 31 |  | 1 |  | 1 |  | - |
| Total Assets |  | 448,132 |  | 412,821 |  | 9,196 |  | 6,769 |
| Investment Purchases |  | 15,227 |  | 14,067 |  | 224 |  | 545 |
| Securities Lending Payable |  | 9,858 |  | 11,855 |  | 179 |  | 175 |
| Other Payables |  | 120 |  | 25 |  | 27 |  | 17 |
| Total Liabilities |  | 25,205 |  | 25,947 |  | 430 |  | 737 |
| Total Net Position | \$ | 422,927 | \$ | 386,874 | \$ | 8,766 | \$ | 6,032 |

## Oregon Public Employees Retirement System

- Member contributions to the defined benefit pension plan decreased $\$ 1.5$ million, or 10.0 percent, in fiscal year 2015, due to a decrease 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 $\$ 36.1$ million, or 6.9 percent, as covered salaries increased due to an increase in OPSRP members from fiscal year 2014 to fiscal year 2015.
- Member contributions to the deferred compensation plan increased $\$ 7.6$ million, or 8.3 percent, in fiscal year 2015. Active membership increased 6.4 percent from 20,897 to 22,243 during the year. Additionally 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: $\$ 2,364.5$ million, an $\$ 7,522.2$ million, or 76.1 percent, decrease over the fiscal year 2014 gain of $\$ 9,886.7$ million
- IAP: $\$ 276.9$ million in fiscal year 2015, a $\$ 700.5$ million, or 71.7 percent, decrease from the fiscal year 2014 gain of $\$ 977.4$ million.
- Retirement Health Insurance Account: $\$ 15.6$ million, a $\$ 40.6$ million, or 72.2 percent, decrease from the fiscal year 2014 gain of $\$ 56.2$ million.
- Retiree Health Insurance Premium Account: decreased $\$ 472.1$ thousand to $\$ 266.9$ thousand, a 63.9 percent decrease over the fiscal year 2014 gain of $\$ 739.1$ thousand.
- Deferred compensation plan: $\$ 48.6$ million, a $\$ 154.6$ million, or 76.1 percent, decrease from the fiscal year 2014 gain of $\$ 203.2$ 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 $\$ 3,979.4$ million in fiscal year 2015, a $\$ 84.7$ million, or 2.2 percent, increase over fiscal year 2014 expenses of $\$ 3,894.7$ million, primarily due to
the annual cost of living adjustment. An increase in benefit payments during the fiscal year produced an increase in deductions to net position.
- IAP benefit and other payments decreased $\$ 9.9$ million, or 2.9 percent, during the year, from $\$ 337.5$ million in fiscal year 2014 to $\$ 327.5$ million in fiscal year 2015. Accounts withdrawn decreased due to a decrease in service retirements for the year, and more members electing to take installment payments.
- Deferred compensation benefits and other expenses decreased $\$ 5.5$ million, or 6.0 percent, from $\$ 90.6$ million in fiscal year 2014 to $\$ 85.2$ million in fiscal year 2015. Benefit payments were lower due to decreased retirement activity.
- Retirement Health Insurance Account benefit and other payments decreased $\$ 2.0$ million, or 5.6 percent, from $\$ 35.2$ million in fiscal year 2014 to $\$ 33.2$ million in fiscal year 2015 as more retirees became Medicare eligible.
- Retiree Health Insurance Premium Account benefit payments decreased $\$ 677$ thousand, or 13.3 percent, from $\$ 5.1$ million in fiscal year 2014 to $\$ 4.4$ million in fiscal year 2015, as a result of decreases in participants due to fewer retirements.


## PROPRIETARY FUND

The Standard Retiree Health Insurance Account uses an enterprise fund to account for the activities of PERS' healthcare program, a public entity risk pool.
Tables 3 and 4 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.

## NET POSITION

- The net position of the Standard Retiree Health Insurance Account as of June 30, 2015, is $\$ 54.8$ million, a $\$ 17.7$ million, or 24.4 percent decrease over fiscal year 2014. This decrease was primarily due to PERS Health Insurance Program (PHIP) management increasing member premium rate subsidies, as well as increased claims expense.

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 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2015 |  | 2014 |  | 2015 |  | 2014 |  | 2015 |  | 2014 |  |
| Additions: |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 1,123,257* | \$ | 915,237 | \$ | - | \$ | - | \$ | - | \$ | - |
| Member Contributions |  | 13,785 |  | 15,319 |  | 563,418 |  | 527,303 |  | 99,797 |  | 92,174 |
| Net Investment and Other Income |  | 2,364,479 |  | 9,886,701 |  | 276,949 |  | 977,440 |  | 48,617 |  | 203,182 |
| Total Additions |  | 3,501,521 |  | 10,817,257 |  | 840,367 |  | 1,504,743 |  | 148,414 |  | 295,356 |

Deductions:

| Pension Benefits | 3,927,167 | 3,837,870 | 319,979 | 330,536 | 84,178 | 89,652 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Other | 52,221 | 56,808 | 7,565 | 6,935 | 1,018 | 997 |
| Total Deductions | 3,979,388 | 3,894,678 | 327,544 | 337,471 | 85,196 | 90,649 |
| Net Increase (Decrease) | $(477,867)$ | 6,922,579 | 512,823 | 1,167,272 | 63,218 | 204,707 |

Net Position

| Beginning of Year | 65,401,493 |  |  | 58,478,914 | 6,457,117 |  | 5,289,845 |  | 1,476,670 |  |  | 1,271,963 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| End of Year | \$ | 64,923,626 | \$ | 65,401,493 | \$ | 6,969,940 | \$ | 6,457,117 | \$ | 1,539,888 | \$ | 1,476,670 |

*Employer Contributions includes $\$ 175$ milliion in UAL side account payments and $\$ 38$ million in interest payments related to Employer-specific liabilities.

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 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2015$ |  | 2014 |  | 2015 |  | 2014 |  |
| Additions: |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 53,648 | \$ | 48,253 | \$ | 6,887 | \$ | 6,150 |
| Net Investment and Other Income |  | 15,607 |  | 56,194 |  | 267 |  | 739 |
| Total Additions |  | 69,255 |  | 104,447 |  | 7,154 |  | 6,889 |
| Deductions: |  |  |  |  |  |  |  |  |
| Healthcare Premium Subsidies |  | 31,923 |  | 34,113 |  | 4,231 |  | 4,926 |
| Other |  | 1,279 |  | 1,044 |  | 189 |  | 171 |
| Total Deductions |  | 33,202 |  | 35,157 |  | 4,420 |  | 5,097 |
| Net Increase |  | 36,053 |  | 69,290 |  | 2,734 |  | 1,792 |
| Net Position |  |  |  |  |  |  |  |  |
| Beginning of Year |  | 386,874 |  | 317,584 |  | 6,032 |  | 4,240 |
| End of Year | \$ | 422,927 | \$ | 386,874 | \$ | 8,766 | \$ | 6,032 |

## Oregon Public Employees Retirement System

## CHANGES IN NET POSITION

- Standard Retiree Health Insurance Account insurance premium and other revenue for the year ended June 30, 2015, was $\$ 226.3$ million, a $\$ 27.8$ million, or 14.0 percent, increase from fiscal year 2014. This change resulted from an increase in the number of retirees participating in the healthcare program, as well as revenues from new reinsurance settlements.
- Standard Retiree Health Insurance Account healthcare and other payments for the year ended June 30, 2015 increased $\$ 39.9$ million, or 19.5 percent, from $\$ 204.4$ million in fiscal year 2014 to $\$ 244.3$ million in fiscal year 2015 due to increases in administrative and claims expense.

Tables 5 and 6 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 <br> Insurance Account |  |
| :--- | ---: | ---: |
|  | 2015 |  |
| Cash and Receivables | $\$ 72,908$ | $\$ 97,586$ |
| Net Pension Asset | 44 |  |
| Securities Lending | 2,802 | 4,818 |
| $\quad$ Collateral |  |  |
| Total Assets | 75,754 | 102,404 |


| Deferred Outflow of |  |  |
| :--- | ---: | ---: |
| Resources: <br> Pensions | 16 | - |
|  |  |  |
| Claims Payable | 14,798 | 14,492 |
| Other Payables | 3,321 | 10,637 |
| Securities Lending | 2,802 | 4,818 |
| $\quad$ Payable |  |  |
| Total Liabilities | 20,921 | 29,947 |

Deferred Inflow of Resources:
Pensions
Total Net Position

| 85 | - |
| ---: | ---: |
| $\$ 54,764$ | $\$ 72,457$ |

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

|  | Standard Retiree Health <br> Insurance Account |  |  |
| :--- | ---: | ---: | ---: |
|  | 2015 |  | 2014 |
| Revenues: | $\$ 191,970$ | $\$$ | 198,367 |
| Insurance Premiums |  |  |  |
| Reinsurance | 34,259 | - |  |
| Reimbursements | 358 | 464 |  |
| Investment Income | 21 | 23 |  |
| Other Income | 226,608 | 198,854 |  |
| Total Revenues |  |  |  |

Expenses:
Claims
Increase in Estimated
Liabilities
306
402
Administrative and Other
Expense
Total Expenses
Net Decrease
Net Position
Beginning of Year
End of Year

| 32,091 | 29,001 |  |
| ---: | ---: | ---: |
| 244,301 | 204,414 |  |
|  | $(17,693)$ | $(5,560)$ |
|  | 72,457 |  |
| $\$$ | 54,764 | $\$$ |

## PLAN MEMBERSHIP

Table 7 below reflects the defined benefit pension plan membership as of the end of the fiscal year.

TABLE 7
CHANGES IN PLAN MEMBERSHIP

## As of June 30:

|  | 2015 | 2014 | Percentage Change |
| :---: | :---: | :---: | :---: |
| Retirees and beneficiaries receiving benefits: |  |  |  |
| General | 122,202 | 119,168 | 2.5 \% |
| Police and Fire | 10,304 | 9,970 | 3.4 |
| Total | 132,506 | 129,138 | 2.6 |

Current and terminated employees entitled to benefits but not yet receiving them:
Vested:

| General | 194,588 | 190,023 | 2.4 |
| :--- | ---: | ---: | ---: |
| Police and Fire | 16,389 | 15,993 | 2.5 |
| Nonvested: |  |  | $(7.7)$ |
| General | 2,293 | 2,485 | $(10.9)$ |
| Police and Fire | 106 | 119 | $2.3 \%$ |
| Total | $\underline{213,376}$ | 208,620 |  |

## SERVICE RETIREMENTS

Service retirements fell in fiscal year 2015, after five consecutive years of increases, primarily due to an increase in eligible members not yet receiving benefits. Service retirements in fiscal year 2015 were 6,679 compared to 8,320 in fiscal year 2014, a decrease of 19.7 percent.


## Oregon Public Employees Retirement System

## NET PENSION LIABILITY

The Employers' Net Pension Liability (NPL) as of June 30, 2015 was $\$ 6,727.1$, compared to a Net Pension Asset of $\$ 2,266.7$ as of June 30,2014 . The change was primarily the result of following factors:

- The increase in total pension liability outpacing the increase in fiduciary net position because of decreased investment gains through June 30, 2015, that did not meet actuarially assumed earnings, and increased benefit payments, and
- An increase in the total pension liability resulting from the Oregon Supreme Court's Moro decision, which overturned most of the financially significant portions of the 2013 legislative changes. The potential financial impact of this decision increases the present value of future benefits by $\$ 5.1$ billion. PERS has executed a project to restore COLA payments to benefit recipients and enhance its systems to implement the new COLA allocation going forward.


## INVESTMENT ACTIVITIES

During fiscal year 2015, investments increased 0.9 percent over the prior fiscal year as markets experienced significant volatility compared to prior years. While most asset classes experienced positive investment returns, private equity decreased slightly. Public equity increased approximately $\$ 257.6$ million, or 0.9 percent, as both domestic and international equity exhibited modest returns. Investments in debt securities increased $\$ 168.9$ million, or 1.1 percent as a result of purchases made in accordance with the Oregon Investment Council's asset allocation policy. Private equity investments were
down approximately $\$ 475.9$ million for the year. The Opportunity Portfolio increased approximately $\$ 173.9$ million during the fiscal year, and Alternative asset class increased $\$ 481.3$, or 47.3 percent. The fair value of real estate investments increased by $\$ 38.0$ 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 Table 9 on page 25.

## 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 Moro decision will impact the amount of future benefits payments, as well as future contribution rates. See Note 8 - Litigation for more information.

The assumed rate of return was reduced from $7.75 \%$ to $7.50 \%$, and will impact future earnings crediting, as well as setting future employer rates. See Note 12 - Subsequent Events for more information.

## CONTACTING THE SYSTEM'S FINANCIAL MANAGEMENT

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

TABLE 9
INVESTMENT RETURN* Periods Ending June 30:

|  | 2015 | 2014 |
| :---: | :---: | :---: |
| Total Portfolio Excluding Variable | 4.32\% | 16.59\% |
| Policy Benchmark ${ }^{1}$ | 5.47 | 17.50 |
| Variable Account | 1.15 | 23.55 |
| Benchmark: MSCI All Country World Investable Market Index Net | 0.81 | 23.35 |
| Domestic Stocks | 6.83 | 24.83 |
| Benchmark: Russell 3000 Index | 7.29 | 25.22 |
| International Stocks | (3.07) | 23.18 |
| Benchmark: MSCI All Country World ex-US Investable Market Index Net | (4.97) | 22.28 |
| Fixed Income Segment | 1.47 | 5.50 |
| Benchmark: Custom Index ${ }^{2}$ | 1.38 | 4.43 |
| Real Estate | 12.04 | 12.68 |
| Benchmark: NCREIF Property Index ${ }^{3}$ | 12.72 | 11.18 |
| Private Equity ${ }^{4}$ | 9.54 | 18.75 |
| Benchmark: Russell $3000+300 \mathrm{bps}^{3}$ | 15.71 | 26.23 |
| Alternative Equity ${ }^{5}$ | (1.99) | 4.92 |
| Benchmark: Consumer Price Index +400 bps | 4.13 | 6.32 |
| Opportunity Portfolio | (0.73) | 19.07 |
| Benchmark: Russell 3000 Index | 7.29 | 25.22 |
| Calculations were prepared using a time-weighted rate of return based on the market rate. |  |  |
| ${ }^{1}$ Prior to September 30, 2013, policy benchmark is $46 \%$ Morgan Stanley Capital International All Coun (MSCI ACWI) Net, $27 \%$ Custom Fixed Income Benchmark, $16 \%$ Russell $3000+300 \mathrm{bps}$, and $11 \% \mathrm{~N}$ of Real Estate Investment Fiduciaries (NCREIF) Property Index. <br> From October 31, 2013 to current, policy benchmark is $41.50 \%$ MSCI ACWI Net, $23.50 \%$ Custom FI Russell $3000+300$ bps, $12.50 \%$ NCREIF Property, and $2.50 \%$ Consumer Price Index +400 bps . <br> ${ }^{2}$ Prior to February 28, 2011, $90 \%$ Barclays Capital U.S. Universal Index and $10 \%$ Solomon Smith Barney World Gov't Bond Hedged Index. <br> From March 1, 2011 to December 31, 2013, 60\% Barclays Capital U.S. Universal Index, $20 \%$ S\&P/L Loan Index, $10 \%$ JMP Emerging Market Bond Index Global (EMBI Global) Index, and $10 \%$ Bank of Lynch High Yield Master II Index. <br> From January 1, 2014 to current, 40\% Barclays Capital U.S. Aggregate Bond, 40\% Barclays Capital U Government/Credit Bond Index, 15\% S\&P LSTA Leveraged Loan Index, and 5\% Bank of America M 3 Yield Master II Index. <br> ${ }_{4}^{3}$ Returns are lagged one quarter. <br> 4 Beginning in September 2010, the return combines the estimated return from the most recent quarter w <br> 5 component that trues up the past two quarters' reported returns with the past two quarters' actual return <br> ${ }^{5}$ The inception date is July 1, 2011. | orld Index Council <br> mark, 20\% <br> . Non-US <br> everaged ca Merrill <br> 3 Year ynch High <br> revision |  |

## Oregon Public Employees Retirement System

Statement of Fiduciary Net Position
Pension and Other Postemployment Plans
As of June 30, 2015, with Comparative Totals as of June 30, 2014

|  | Defined Benefit Pension Plan |  | Oregon <br> Public Service Retirement Plan Individual Account Program |  | OPEB Plans |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Retirement Health Insurance Account | Retiree Health Insurance Premium Account |  |
| Assets: |  |  |  |  |  |  |  |  |
| Cash and Cash Equivalents | \$ | 2,798,796,387 |  |  | \$ | 333,171,217 | \$ | 22,568,378 | \$ | 915,252 |
| Receivables: |  |  |  |  |  |  |  |  |
| Employer |  | 44,691,222 |  | - |  | 2,911,873 |  | 597,583 |
| Plan Member |  | - |  | 14,349,714 |  | - |  | - |
| Interest and Dividends |  | 284,839,050 |  | 31,417,054 |  | 1,862,926 |  | 33,218 |
| Member Loans |  | - - |  | - - |  | - |  | - |
| Investment Sales and Other Receivables |  | 887,962,044 |  | 88,196,950 |  | 5,356,632 |  | 160,483 |
| Transitional Liability |  | 576,225,687 |  | - |  | - |  | - |
| Total Receivables |  | 1,793,718,003 |  | 133,963,718 |  | 10,131,431 |  | 791,284 |
| Due from Other Funds |  | 1,436,255 |  | 5,055,693 |  | 464,390 |  | 86,983 |
| Investments: |  |  |  |  |  |  |  |  |
| Debt Securities |  | 13,893,038,659 |  | 1,507,160,839 |  | 90,864,495 |  | 1,620,217 |
| Public Equity |  | 26,092,490,396 |  | 2,751,929,400 |  | 165,909,749 |  | 2,958,359 |
| Real Estate |  | 6,958,606,384 |  | 754,891,661 |  | 45,511,301 |  | 811,518 |
| Private Equity |  | 13,412,456,545 |  | 1,455,025,768 |  | 87,721,349 |  | 1,564,171 |
| Alternative Equity |  | 1,343,349,410 |  | 145,730,799 |  | 8,785,894 |  | 156,662 |
| Opportunity Portfolio |  | 963,061,925 |  | 104,476,008 |  | 6,298,704 |  | 112,313 |
| Total Investments |  | 62,663,003,319 |  | 6,719,214,475 |  | 405,091,492 |  | 7,223,240 |
| Securities Lending Collateral |  | 1,502,081,780 |  | 163,077,704 |  | 9,845,070 |  | 178,696 |
| Prepaid Expenses |  | 5,802,438 |  | - - |  | 31,161 |  | 556 |
| Capital Assets at Cost, Net |  | 34,539,512 |  | 311,253 |  | - |  | - |
| Total Assets |  | 68,799,377,694 |  | 7,354,794,060 |  | 448,131,922 |  | 9,196,011 |
| Liabilities: |  |  |  |  |  |  |  |  |
| Investment Purchases and Accrued Expenses |  | 2,258,427,261 |  | 208,606,959 |  | 15,226,579 |  | 223,746 |
| Deposits and Other Liabilities |  | 105,847,188 |  | 12,067,449 |  | 6,321 |  | 1,218 |
| Due to Other Funds |  | 5,607,066 |  | 882,767 |  | 113,945 |  | 25,701 |
| Bonds Payable |  | 1,315,411 |  | - |  | - |  | - |
| Unearned Revenue |  | 450,522 |  | - |  | - |  | - |
| Securities Lending Collateral Due Borrowers |  | 1,504,104,152 |  | 163,297,097 |  | 9,858,297 |  | 178,932 |
| Total Liabilities |  | 3,875,751,600 |  | 384,854,272 |  | 25,205,142 |  | 429,597 |
| Net Position Restricted for Pension and Other Postemployment Benefits | \$ | 64,923,626,094 | \$ | 6,969,939,788 | \$ | 422,926,780 | \$ | 8,766,414 |

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

| Deferred Compensation Plan |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 52,326,188 | \$ | 3,207,777,422 | \$ | 3,412,026,705 |
|  | - |  | 48,200,678 |  | 31,209,940 |
|  | - |  | 14,349,714 |  | 9,340,930 |
|  | 301,629 |  | 318,453,877 |  | 311,075,680 |
|  | 11,242,732 |  | 11,242,732 |  | 9,915,472 |
|  | 98,422 |  | 981,774,531 |  | 1,268,881,925 |
|  | - |  | 576,225,687 |  | 595,168,180 |
|  | 11,642,783 |  | 1,950,247,219 |  | 2,225,592,127 |
|  | - |  | 7,043,321 |  | 6,833,480 |
|  | 216,869,578 |  | 15,709,553,788 |  | 15,540,685,412 |
|  | 1,259,919,999 |  | 30,273,207,903 |  | 30,015,605,968 |
|  | - |  | 7,759,820,864 |  | 7,721,839,842 |
|  | - |  | 14,956,767,833 |  | 15,432,635,107 |
|  | - |  | 1,498,022,765 |  | 1,016,745,502 |
|  | - |  | 1,073,948,950 |  | 900,094,506 |
|  | 1,476,789,577 |  | 71,271,322,103 |  | 70,627,606,337 |
|  | 10,807 |  | 1,675,194,057 |  | 2,190,071,330 |
|  | - |  | 5,834,155 |  | 1,004,622 |
|  | - |  | 34,850,765 |  | 36,293,757 |
|  | 1,540,769,355 |  | 78,152,269,042 |  | 78,499,428,358 |
|  | 578,349 |  | 2,483,062,894 |  | 2,448,307,135 |
|  | 14,795 |  | 117,936,971 |  | 121,023,035 |
|  | 148,893 |  | 6,778,372 |  | 6,787,211 |
|  | - |  | 1,315,411 |  | 1,943,191 |
|  | 128,563 |  | 579,085 |  | 965,916 |
|  | 10,807 |  | 1,677,449,285 |  | 2,192,216,800 |
|  | 881,407 |  | 4,287,122,018 |  | 4,771,243,288 |
| \$ | 1,539,887,948 | \$ | 73,865,147,024 | \$ | 73,728,185,070 |

## Oregon Public Employees Retirement System

## Statement of Changes in Fiduciary Net Position <br> Pension and Other Postemployment Plans

For the Year Ended June 30, 2015, with Comparative Totals for the Year Ended June 30, 2014

Deferred Compensation

Plan

| $\$$ | - |
| :--- | ---: |
| $99,796,739$ |  |




1,112,641
$148,414,167$

84,177,564

1,018,468
85,196,032

63,218,135

|  | $1,476,669,813$ |
| :---: | ---: |
| $\$ \quad 1,539,887,948$ |  |


| $\$$ | $1,183,792,398$ |
| ---: | ---: |
| $676,999,827$ |  |
| $1,860,792,225$ |  |


| $\$$ | $969,639,884$ |
| ---: | ---: |
| $634,796,807$ |  |


| $1,671,240,871$ | $9,955,646,820$ |
| ---: | ---: |
| $1,566,166,479$ | $1,650,632,953$ |
| $3,237,407,350$ | $11,606,279,773$ |

$547,523,267$
$2,689,884,083$

| $504,680,710$ |
| ---: |
| $11,101,599,063$ |

73,728,185,070 \$ 73,865,147,024

2014

1,604,436,691

11,101,599,063

| $15,862,667$ |  |
| :---: | :---: |
| $(3,726,619)$ |  |
| $12,136,048$ | $18,820,724$ |
|  | $(2,489,516)$ |
| $16,331,208$ |  |

6,324,606
12,728,691,568

4,252,255,445
5,802,797
25,560,094
40,395,370
39,038,310
4,363,052,016
8,365,639,552

|  | $65,362,545,518$ |
| :--- | ---: |
| $\mathbf{\$} \quad \mathbf{7 3 , 7 2 8 , 1 8 5 , 0 7 0}$ |  |

## Oregon Public Employees Retirement System

Statement of Net Position - Proprietary Fund
As of June 30, 2015, with Comparative Totals as of June 30, 2014

Enterprise Fund

| Standard Retiree Health Insurance Account |  |  |
| ---: | ---: | ---: |
| $\mathbf{2 0 1 5}$ |  | $\mathbf{2 0 1 4}$ |
|  |  |  |
| $\$$ | $52,191,378$ | $\$$ |
|  | $20,716,315$ |  |
|  |  |  |
|  | $\mathbf{7 5 , 7 1 0 , 2 2 2}$ |  |
|  |  | $\mathbf{1 0 2 , 8 1 8 , 1 2 1}$ |

Noncurrent Assets
Net Pension Asset
Total Noncurrent Assets

Total Assets

| 43,819 |
| ---: |
| $\mathbf{4 3 , 8 1 9}$ |

$\qquad$

75,754,041
102,403,796

Deferred Outflow of Resources
Pensions
Total Deferred Outflow of Resources


Liabilities:
Current Liabilities
Estimated Insurance Claims Due
Accrued Expenses
Due to Other Funds
Securities Lending Collateral Due Borrowers
Total Current Liabilities

| $14,798,000$ | $14,492,000$ |
| ---: | ---: |
| $3,028,020$ | $10,561,724$ |
| 264,950 | 46,269 |
| $2,802,529$ | $4,818,121$ |
|  | $\mathbf{2 9 , 9 1 8 , 1 1 4}$ |

## Noncurrent Liabilities

Other Liabilities
Total Noncurrent Liabilities

Total Liabilities

Deferred Inflow of Resources
Pensions
Total Deferred Inflow of Resources

Total Unrestricted Net Position

| 27,859 |
| ---: |
| $\mathbf{2 7 , 8 5 9}$ |


| $20,921,358$ | $29,947,126$ |
| :--- | :--- |


| $\mathbf{8 4 , 5 5 3}$ |
| ---: |
| $\mathbf{8 4 , 5 5 3}$ |

$\$ \quad \mathbf{5 4 , 7 6 4 , 3 4 8} \xlongequal{\mathbf{7 2 , 4 5 6 , 6 7 0}}$

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, 2015, with Comparative Totals for the Year Ended June 30, 2014|  | Enterprise Fund |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Standard Retiree Health Insurance Account |  |  |  |
|  |  | 2015 |  | 2014 |
| Operating Revenues: |  |  |  |  |
| Insurance Premium Revenue | \$ | 191,970,498 | \$ | 198,366,723 |
| Reinsurance Reimbursements |  | 34,258,822 |  | - - |
| Other Income |  | 21,841 |  | 23,358 |
| Total Operating Revenues |  | 226,251,161 |  | 198,390,081 |
| Operating Expenses: |  |  |  |  |
| Claims Expense |  | 211,904,113 |  | 175,010,623 |
| Increase in Estimated Liabilities |  | 306,000 |  | 402,000 |
| Administrative Expense |  | 32,090,976 |  | 29,001,260 |
| Total Operating Expenses |  | 244,301,089 |  | 204,413,883 |
| Operating Loss |  | $(18,049,928)$ |  | $(6,023,802)$ |
| Non-Operating Revenues: |  |  |  |  |
| Interest, Dividends, and Other Investment Income |  | 357,606 |  | 463,522 |
| Securities Lending Income |  | 4,794 |  | 5,333 |
| Less Securities Lending Expense |  | $(4,794)$ |  | $(5,333)$ |
| Net Securities Lending Income |  | - |  | - |
| Total Non-Operating Revenue |  | 357,606 |  | 463,522 |
| Change in Unrestricted Net Position |  | $(17,692,322)$ |  | $(5,560,280)$ |
| Total Unrestricted Net Position |  |  |  |  |
| Beginning of Year |  | 72,456,670 |  | 78,016,950 |
| End of Year | \$ | 54,764,348 | \$ | 72,456,670 |

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

|  | Enterprise Funds |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Standard Retiree Health Insurance Account $2015 \quad 2014$ |  |  |  |
| Cash Flows from Operating Activities: |  |  |  |  |
| Insurance Premiums and Reinsurance Reimbursements | \$ | 205,513,005 | \$ | 198,366,723 |
| Claims Paid |  | $(211,904,113)$ |  | (175,010,623) |
| Other Receipts |  | 21,841 |  | 23,358 |
| Other Payments |  | $(39,382,636)$ |  | $(18,669,874)$ |
| Net Cash Provided by/(Used for) Operating Activities |  | $(45,751,903)$ |  | 4,709,584 |
| Cash Flows from Investing Activities |  |  |  |  |
| Interest and Dividends Received |  | 357,606 |  | 463,522 |
| Net Increase/(Decrease) in Cash and Cash Equivalents |  | $(45,394,297)$ |  | 5,173,106 |
| Cash and Cash Equivalents Beginning of Year |  | 97,585,675 |  | 92,412,569 |
| Cash and Cash Equivalents End of Year | \$ | 52,191,378 | \$ | 97,585,675 |
| Reconciliation of Operating Loss to Net Cash Provided by/(Used for) Operating Activities |  |  |  |  |
| Operating Loss | \$ | $(18,049,928)$ | \$ | $(6,023,802)$ |
| Changes in Assets, Deferred Outflows of Resources, Liabilities, and Deferred Inflows of Resources: |  |  |  |  |
| Reinsurance Reimbursements and Rebate Receivables |  | $(20,716,315)$ |  | - |
| Net Pension Asset |  | $(43,819)$ |  | - |
| Deferred Outflows of Resources |  | $(16,218)$ |  | - |
| Estimated Insurance Claims Due |  | 306,000 |  | 402,000 |
| Accrued Expenses |  | $(7,533,704)$ |  | 10,548,420 |
| Due to Other Funds |  | 218,681 |  | $(216,420)$ |
| Other Liabilities |  | $(1,153)$ |  | (614) |
| Deferred Inflow of Resources |  | 84,553 |  | - |
| Net Cash Provided by/(Used for) Operating Activities | \$ | $(45,751,903)$ | \$ | 4,709,584 |

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

## Notes to the Financial Statements <br> June 30, 2015

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, 2015, 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 multi-ple-employer plan
- Variable Annuity Account, a separate and distinct account within the Defined Benefit Pension Plan
- 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 are recognized in the month they are earned, and withdrawals are recognized in the month they are due and payable.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues are insurance premiums and reinsurance reimbursements, and operating expenses include
claims and administrative expenses. All revenues and expenses not meeting this definition are reported as nonoperating 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/(addition) of the net pension liability/ (asset) 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 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

## Oregon Public Employees Retirement System

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 at which financial instruments could be exchanged in a current transaction between willing parties other than in a forced or liquidation sale.
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, 2015, 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 30,2015 , 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, 2015 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 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.

TABLE 1

| Asset Class | Target Allocation |
| :--- | :---: |
| Cash | $0.0 \%$ |
| Debt Securities | $20.0 \%$ |
| Public Equity | $37.5 \%$ |
| Private Equity | $20.0 \%$ |
| Real Estate | $12.5 \%$ |
| Alternative Equity | $10.0 \%$ |
| Opportunity Portfolio | $0.0 \%$ |
| Total | $100.0 \%$ |
| See Geometic Return Table 29 on page 57. |  |

Table 1 above displays the OIC approved asset allocation policy for fiscal years beginning in 2014. The previous allocation was amended to reduce debt securities and public entity holdings, and to increase private equity, real estate and alternative equity holdings. See the Annual Money-Weighted Return table on page 61.

## 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, 2014, from which the summarized information was derived.

## J. GASB Pronouncements

## Adoption of New GASB Pronouncements

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. In addition, it establishes requirements for defined contribution pensions that are not within the scope of Statement 68. 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 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.

## Note 2 - Description of Plan

## A. Organization

PERS administers a cost-sharing, multiple-employer 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, 2015, there were 910 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

The 1995 Legislature enacted Chapter 654, Section 3, Oregon Laws 1995, which has been codified into ORS

## Oregon Public Employees Retirement System

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, 2015, there were 32,542 active plan members, 119,865 inactive plan members or their beneficiaries currently receiving benefits, 15,847 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 168,264 Tier One members. As of June 30, 2015, there were 41,275 active plan members, 10,890 inactive plan members or their beneficiaries currently receiving benefits, 15,400 inactive plan members entitled to but not yet receiving benefits, and 753 inactive plan members not eligible for refund or retirement, for a total of 68,318 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, 2015, there were 94,773 active plan members, 1,751 inactive plan members or their beneficiaries currently receiving benefits, 4,227 inactive plan members entitled to but not yet receiving benefits, and 8,549 inactive plan members not eligible for refund or retirement, for a total of 109,300 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

TABLE 2

| Plan Membership as of June 30, 2015 | Defined Benefit Plan |  |  |  |  | Post-Employment Healthcare |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employers | Tier 1 | Tier 2 | OPSRP | Total | RHIA | RHIPA |
| Employers |  |  |  |  |  |  |  |
| State Agencies | 112 |  |  |  |  |  |  |
| School Districts | 296 |  |  |  |  |  |  |
| Political Subdivisions | 485 |  |  |  |  |  |  |
| Community Colleges | 17 |  |  |  |  |  |  |
| Inactive Members - General Service |  |  |  |  |  |  |  |
| Retirees and beneficiaries currently receiving benefits |  | 110,161 | 8,337 | 1,634 | 120,132 | 42,190 | 1,153 |
| Alternate Payees currently receiving benefits |  | 557 | 1,513 | - | 2,070 | N/A | N/A |
| Inactive members eligible for, but not yet receiving benefits |  | 9,744 | 6,357 | 4,102 | 20,203 | 15,246 | N/A |
| Inactive members eligible for refund value of account only |  | 5,514 | 8,381 | N/A ${ }^{1}$ | 13,895 | N/A | N/A |
| Inactive members not eligible for refund or retirement |  | 8 | 724 | 8,121 | 8,853 | N/A | N/A |
| Inactive Members - Police and Fire |  |  |  |  |  |  |  |
| Retirees and beneficiaries currently receiving benefits |  | 8,996 | 717 | 117 | 9,830 | 2,347 | 123 |
| Alternate Payees currently receiving benefits |  | 151 | 323 | - | 474 | N/A | N/A |
| Inactive members eligible for, but not yet receiving benefits |  | 391 | 281 | 125 | 797 | 809 | N/A |
| Inactive members eligible for refund value of account only |  | 198 | 381 | N/A ${ }^{1}$ | 579 | N/A | N/A |
| Inactive members not eligible for refund or retirement |  | 2 | 29 | 428 | 459 | N/A | N/A |
| Active Members - General Service |  |  |  |  |  |  |  |
| State Agencies |  | 8,220 | 9,010 | 24,798 | 42,208 | 17,020 | 17,020 |
| School Districts |  | 12,616 | 16,624 | 37,132 | 66,372 | 28,978 |  |
| Political Subdivisions |  | 7,331 | 9,137 | 20,896 | 37,364 | 16,316 |  |
| Community Colleges |  | 1,311 | 1,867 | 4,988 | 8,166 | 3,137 |  |
| Active Members - Police and Fire |  |  |  |  |  |  |  |
| State Agencies |  | 1,070 | 1,873 | 2,649 | 5,592 | 2,932 | 2,932 |
| School Districts |  | 13 | 21 | 28 | 62 | 34 |  |
| Political Subdivisions |  | 1,981 | 2,743 | 4,282 | 9,006 | 4,711 |  |
| ${ }^{1}$ Defined benefit only. No individual accounts are maintained. |  |  |  |  |  |  |  |

directed to adopt any rules necessary to administer OPSRP, and such rules are to be considered part of the plan for IRS purposes.
Employer, employee, and retiree data as of June 30, 2015, is shown in Table 2 on the previous page.

## 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 average salary for the first 16 years of service and 1.67 percent of the final average salary multiplied by the number of years of service as a judge in excess of 16. For most judge members the maximum amount is limited to 65 percent of final average salary. The Plan B retirement allowance for judge members is computed by multiplying 3.75 percent by the final average salary for the first 16 years of service
and 2.0 percent of the final average salary multiplied by the number of years of service as a judge in excess of 16 . 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. The COLA for fiscal year 2015 was capped at 1.5 percent for all benefit recipients. As a result of the Moro Decision (Everice Moro et al v. State of Oregon et al), the cap on the COLA will be restored to 2.0 percent for fiscal years 2016 and beyond. See Note 8 for details about the Moro Decision.

## Oregon Public Employees Retirement System

## 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 $701 / 2$ years.

## 3. Disability Benefits

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

## c. 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 OPSRP Individual Account Program (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 costsharing, multiple-employer defined benefit OPEB plan for 910 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, 2015, PERS employers contributed 0.10 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA benefits. PERS employers contributed 0.49 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. This is included in the employer contribution rates listed in Table 3 on page 39.

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 44,537 for the fiscal year ended June 30, 2015, and there were 73,128 active and 16,055 inactive members who meet the requirements to receive RHIA benefits when they retire.

ORS 238.415 established the Retiree Health Insurance

TABLE 3

| Contribution Rate Summary | Defined Benefit Pension |  |  |  |  |  |  | Postemployment Healthcare |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PERS Defined Benefit Plan |  |  |  |  | OPSRP Pension <br> 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 <br> Subdivisions 3,4 | Judiciary | General <br> Service | Police and $\qquad$ |  |  |
| Employee IAP | 6.00\% | 6.00\% | 6.00\% | 6.00\% | 6.00\% | 6.00\% | 6.00\% | 0.00\% | 0.00\% |
| Employee <br> Normal Cost | 0.00 | 0.00 | 0.00 | 0.00 | 7.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Employer <br> Normal Cost | 8.92 | 9.15 | 8.17 | 11.03 | 21.89 | 6.27 | 9.00 | 0.10 | 0.07 |
| Unfunded Actuarial Liability | 1.03 | 6.02 | 13.38 | 2.40 | (4.31) | 0.15 | 0.15 | 0.49 | 0.20 |
| Total Employer Contributions | 9.95 | 15.17 | 21.55 | 13.43 | 17.58 | 6.42 | 9.15 | 0.59 | 0.27 |
| ${ }^{1}$ Group average rates shown were effective as of July 1, 2013, post Senate Bill 822. <br> 2 A subcomponent of the State and Local Government Rate Pool; includes UAL payment rate offset. <br> ${ }^{3}$ Does not include UAL payment rate offsets. <br> ${ }^{4}$ Non-pooled Political Subdivisions are valued separately for the Defined Benefit Plan. |  |  |  |  |  |  |  |  |  |

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 state employees who are not retired. 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, 2015, state agencies contributed 0.07 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIPA benefits. State agencies contributed 0.20 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 recipients who are not subject to Oregon income tax because they do not reside in Oregon, and limited the 2013 post-retirement COLA to $1.5 \%$ of the annual benefit. This is included in the employer contribution rates listed in Table 3 above.

The number of active plan RHIPA participants receiving benefits was 1,276 for the fiscal year ended June 30, 2015.

As of June 30, 2015 there were 19,952 active members who meet the requirements to receive RHIPA benefits when they retire. Inactive members are not eligible for these benefits. All subsidy payments from the RHIA and RHIPA are initially deposited in the Standard Retiree Health Insurance Account, described on page 54, 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, 2015 , the fair value of investments was $\$ 1,476.8$ 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, 2015, total $\$ 11.2$ million. Of that amount $\$ 9.0$ 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 19 investment options with varying degrees of market risk. Up to five financial institutions provide investment services in mutual

## Oregon Public Employees Retirement System

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, 2015, was 22,243.

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, 2015, averaged 0.20 percent of amounts deferred.
Oregon Revised Statute 243.505 established a Deferred Compensation Advisory Committee to provide input to the PERS Board. This committee is composed of seven members who meet at least quarterly.

## f. Standard Retiree Health Insurance Account

ORS 238.410 established the Standard Retiree Health Insurance Account (SRHIA), a public entity risk pool. SRHIA is both a risk sharing and insurance purchasing pool. The Board contracts for medical and hospital insurance on behalf of retired members. Members and their dependents are eligible for PERS healthcare coverage if the member is receiving a retirement allowance or benefit under the System. A surviving spouse or dependent of a PERS retiree is eligible to participate if he or she was covered under the health plan at the time of the retiree's death. As of June 30, 2015, there are 59,519 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 $\$ 4.7$ million as of June 30, 2015. 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 2015, SRHIA recognized Reinsurance Reimbursement and Rebate receivables of approximately $\$ 20.7$ million. These receivables were comprised of $\$ 15.7$ million in reinsurance settlements, $\$ 2.6$ million in outstanding drug rebates, and $\$ 2.4$ million in coverage gap discounts. 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 $\$ 14.8$ million.
In fiscal year 2012 SRHIA received $\$ 2.2$ million in Early Retiree Reinsurance Program (ERRP) funds through the federal government's Affordable Care Act. The purpose of ERRP is to generate cost savings so that employers can maintain healthcare coverage for early retirees age 55 and older who are not yet eligible for Medicare. PERS has achieved this purpose by using the ERRP funds to reduce healthcare insurance premiums. As of June 30, 2015, ERRP funds were fully expended.

## 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, 2011 actuarial valuation, which became effective July 1, 2013. 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 the previous page.

## 1. PERS Defined Benefit Plan Contributions (ORS

 238)Pension rates for the State and Local Government Rate Pool were 15.17 percent, schools 21.55 percent, and judiciary 17.58 percent of PERS-covered salaries, effective July 1, 2013. Political subdivisions that have not joined
the State and Local Government Rate Pool had an average pension rate of 13.43 percent.

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

Based on the actuarial valuation as of December 31, 2011, the judiciary, state agencies, and schools had increases in employer contribution rates on July 1, 2013, while employer contribution rates for political subdivisions slightly decreased. These rate changes are measured against the actual average rates paid since July 1, 2011. 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, 2013, through June 30,2015 , were 6.42 percent of covered salaries for general service employees and 9.15 percent of covered salaries for police and fire employees. These rates increased from 6.21 percent of covered salaries for general service and 8.92 percent of covered salaries for police and fire employees for the period July 1, 2011, through June 30, 2013. 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.

The Strunk and Eugene Accrual resulted from recalculating benefits for recipients who received overpayments based on the reallocation of 1999 earnings. Approximately 78.6 percent of these receivables, or $\$ 73.8$ million, is expected to be collected after June 30, 2015.

Additionally, there were $\$ 20.7$ million in Reinsurance Reimbursements and Rebate receivables reported in the Statement of Net Position - Proprietary Fund. Prior to the issuance of this report, $\$ 16.7$ million of those receivables had been received.

## B. Payables

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

## Note 4 - Investments

The Oregon State Treasury is the investment officer for the state of Oregon. Investment standards are established in ORS

TABLE 4

| Accounts Receivable |  |  |
| :---: | :---: | :---: |
|  | June 30, 2015 |  |
| Broker Receivable | \$ | 906,211,433 |
| Strunk/Eugene Accrual |  | 73,801,354 |
| Overpaid Benefits |  | 49,312 |
| Other |  | 1,712,432 |
| Total | \$ | 981,774,531 |

TABLE 5

| Accounts Payable |  |  |
| :--- | ---: | ---: |
|  | June 30, 2015 |  |
| Broker Payable | $\$$ | $2,103,134,475$ |
| Pension Roll |  | $317,126,536$ |
| Investment Fees | $36,488,122$ |  |
| Death Benefits | $18,265,372$ |  |
| Compensated Absences | $1,731,649$ |  |
| Services and Supplies | $1,453,539$ |  |
| Other | $\mathbf{4 , 8 6 3 , 2 0 2}$ |  |
| $\quad$ Total | $\mathbf{\$}$ | $\mathbf{2 , 4 8 3 , 0 6 2 , 8 9 4}$ |

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). OSTF is separately audited by the Oregon Audits Division. The audited financial statements can be viewed at http://sos. oregon.gov/audits/Documents/2015-22.pdf. OSTF investment risks are addressed in the notes to those financial statements.

Health Insurance Claims Fund of $\$ 4.7$ 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

TABLE 6

| Depository Account | Bank Balance |  |
| :--- | ---: | ---: |
| Insured | $\$ 500,000$ |  |
| Oregon Short Term Fund |  | $1,735,070,971$ |
| Health Insurance Claims Fund | $4,411,940$ |  |
| Uninsured and uncollateralized | $1,523,078,320$ |  |
| Total deposits | $\mathbf{3 , 2 6 3 , 0 6 1 , 2 3 1}$ |  |

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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, 2015, the carrying amount of PERS' deposits in OSTF totaled $\$ 1,732.0$ million, and corresponding bank balance was $\$ 1,735.1$ million.

Investment managers' deposits with custodian banks consist of cash and cash equivalents that represent buying reserves. As of June 30, 2015, there was $\$ 1,560.2$ 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, 2015, \$86.7 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 10 on page 44.

## 3. Restricted Cash Equivalents

PERS' cash and cash equivalents at June 30, 2015, include collateral of $\$ 33.6$ 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 presents the fair value of investments held by the state of Oregon for PERS as of June 30, 2015.

## 1. Rate of Return

For the year ended June 30, 2015, the annual money-weighted rate of return on defined benefit pension plan investments, net of defined benefit pension plan investment expenses, was 3.66 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.

## 2. Investment Concentrations

As of June 30, 2015, there were no organizations that represent 5 percent or more of the pension plan's fiduciary net position, or total investments.

## 3. 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

TABLE 7

| Investments at June 30, 2015 | Fair Value |
| :--- | ---: |
| U.S. Treasury Obligations | $\$$ |
| U.S. Federal Agency Mortgage Securities | $809,276,508$ |
| U.S. Federal Agency Mortgage TBAs | $801,179,019$ |
| U.S. Federal Agency Debt | $405,860,147$ |
| U.S. Federal Agency Strips | $52,725,312$ |
| U.S. Treasury Obligations - Strips | $59,384,897$ |
| U.S. Treasury Obligations - TIPS | $119,129,345$ |
| International Debt Securities | $2,284,452,419$ |
| Non-Government Debt Securities | $209,701,468$ |
| Corporate Bonds | $3,758,283,801$ |
| Bank Loans | $2,325,763,907$ |
| Municipal Bonds | $95,670,114$ |
| Collateralized Mortgage Obligations | $1,251,627,850$ |
| Asset-Backed Securities | $1,153,514,000$ |
| Guaranteed Investment Contracts | $157,270,916$ |
| Mutual Funds - Domestic Fixed Income | $515,942,594$ |
| Mutual Funds - International Fixed Income | $67,595,997$ |
|  | $15,709,553,788$ |
| Derivatives in Asset Positions | $4,468,834$ |
| Domestic Equity Securities | $11,002,412,114$ |
| International Equity Securities | $10,142,515,721$ |
| Mutual Funds - Domestic Equity | $4,436,392,684$ |
| Mutual Funds - Global Equity | $725,150,310$ |
| Mutual Funds - International Equity | $3,515,390,105$ |
| Mutual Funds - Target Date | $441,258,366$ |
| Oregon Savings Growth Plan - Self-Directed | $5,619,769$ |
| Real Estate and Real Estate Investment Trusts | $7,759,820,864$ |
| Private Equity | $14,956,767,833$ |
| Alternative Equity | $1,498,022,765$ |
| Opportunity Portfolio | $1,073,948,950$ |
| Total PERS Investments | $\mathbf{7 1 , 2 7 1 , 3 2 2 , 1 0 3}$ |

TABLE 8

| Credit Risk Debt Securities at June 30, 2015 | Fair Value |
| :--- | ---: |
| Quality Rating |  |
| AAA | $\$, 950,508,659$ |
| AA | $729,329,106$ |
| A | $1,696,244,180$ |
| BBB | $2,427,000,448$ |
| BB | $903,213,815$ |
| B | $2,548,158,981$ |
| CCC | $559,642,778$ |
| CC | 472,640 |
| D | $15,693,545$ |
| Not Rated | $1,364,051,803$ |
| Not Rated ${ }^{1}$ | $1,375,389,672$ |
| Total Subject to Credit Risk | $\mathbf{1 3 , 5 6 9 , 7 0 5 , 6 2 7}$ |
| U.S. Government Guaranteed Securities | $2,139,848,161$ |
| Total Debt Securities | $\mathbf{1 5 , 7 0 9 , 5 5 3 , 7 8 8}$ |
| 1 $_{\text {Federal Agency securities, which are not rated by the credit rating agencies as they }}$ |  |
| carry an implicit guarantee of the U.S. Government. |  |

policy restriction on other investment managers who may hold debt securities. As of June 30, 2015, the fair value of below grade investments, excluding unrated securities, is $\$ 4,027.2$ million, or 29.7 percent, of total securities subject
to credit risk, and the weighted quality rating average is BBB. Unrated securities include $\$ 407.4$ million in bank loans, $\$ 740.8$ million in mutual funds and guaranteed investment contracts, and $\$ 215.9$ million in other debt securities.

Table 8 on the previous page shows the quality ratings for credit risk debt securities as of June 30, 2015.

## 4. 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, 2015, no investments were exposed to custodial credit risk.

## 5. 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 creditindependent 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

TABLE 9
vehicles-no more than 3 percent of the debt investment portfolio.
As of June 30, 2015, 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.

## 6. 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, 2015, the weighted average duration of PERS' fixed income portfolio was 4.19 years.

Effective duration is a measure of a fixed income investment's exposure to fair value changes arising from changes

| Schedule of Interest Rate Risk - Effective Duration at June 30, 2015 |  |  |  |
| :---: | :---: | :---: | :---: |
| Investment |  | Fair Value | Effective Weighted Duration Rate (in years) |
| U.S. Treasury Obligations | \$ | 1,589,778,493 | 6.22 |
| U.S. Treasury Obligations - Strips |  | 9,237,016 | 2.69 |
| U.S. Treasury Obligations - TIPS |  | 119,129,345 | 5.68 |
| U.S. Federal Agency Mortgage Securities |  | 786,222,696 | 3.38 |
| U.S. Federal Mortgage TBAs |  | 801,175,494 | 4.38 |
| U.S. Federal Agency Debt |  | 355,873,369 | 2.54 |
| U.S. Federal Agency Strips |  | 50,078,144 | 4.21 |
| International Debt Securities |  | 77,099,005 | 3.45 |
| Non-U.S. Government Debt Securities |  | 22,347,509 | 8.86 |
| Corporate Bonds |  | 3,722,901,641 | 4.37 |
| Municipal Bonds |  | 54,834,428 | 8.56 |
| Collateralized Mortgage Obligations |  | 859,200,873 | 2.38 |
| Asset-Backed Securities |  | 972,740,880 | 2.44 |
| Mutual Funds - Domestic Fixed Income |  | 515,942,594 | 3.91 |
| Mutual Funds - International Fixed Income |  | 67,595,997 | 5.22 |
| No Effective Duration: |  |  |  |
| U.S. Treasury Obligations |  | 19,498,015 | N/A |
| U.S. Treasury Obligations - Strips |  | 50,147,881 | N/A |
| U.S. Federal Agency Mortgage Securities |  | 55,956,323 | N/A |
| U.S. Federal Agency Debt |  | 49,986,778 | N/A |
| U.S. Federal Agency Strips |  | 2,647,168 | N/A |
| International Debt Securities |  | 2,207,353,414 | N/A |
| Non-U.S. Government Debt Securities |  | 187,353,959 | N/A |
| Corporate Bonds |  | 35,382,160 | N/A |
| Bank Loans |  | 2,325,763,907 | N/A |
| Municipal Bonds |  | 40,835,686 | N/A |
| Collateralized Mortgage Obligations |  | 392,426,977 | N/A |
| Asset-Backed Securities |  | 180,773,120 | N/A |
| Guaranteed Investment Contracts |  | 157,270,916 | N/A |
| Total Debt Securities |  | 15,709,553,788 |  |
| Cash Equivalent - Mutual Funds - STIF |  | 1,352,895,117 | 32 Days ${ }_{1}$ |
| Cash Equivalent - Oregon Short Term Funds |  | 1,467,653,894 | 179 Days ${ }^{1}$ |
| Total Subject to Interest Rate Risk |  | 18,530,102,799 |  |

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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 port-
folio was outside the policy guidelines at June 30, 2015. Table 9 on the previous page shows the investments by type, amount, and effective weighted duration.
At June 30, 2015, PERS held approximately $\$ 2,093.8$ 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

TABLE 10

| Currency Exposures by Asset Class in U.S. Dollar Equivalents as of June 30, 2015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Currency | Cash and Cash Equivalents |  |  | Debt Securities |  | Public Equity | Derivatives in Asset Positions |  |  | Real <br> Estate |  | Private <br> Equity | Total |  |
| Argentine peso | \$ | 36,716 | \$ | - | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 36,716 |
| Australian dollar |  | 1,742,958 |  | 2,657,228 |  | 351,491,167 |  | 114,964 |  | 70,315,086 |  | - |  | 426,321,403 |
| Bolivar fuerte |  | 2,094 |  | - |  | 32 |  | - |  | - |  | - |  | 2,126 |
| Brazilian real |  | 629,746 |  | 8,289,136 |  | 174,579,204 |  | - |  | 2,214,138 |  | - |  | 185,712,224 |
| Canadian dollar |  | 3,830,341 |  | 1,016,461 |  | 432,933,979 |  | - |  | 26,416,612 |  | - |  | 464,197,393 |
| Chilean peso |  | 7,699 |  | - |  | 5,094,715 |  | - |  | - |  | - |  | 5,102,414 |
| Chinese yuan |  | 892,397 |  | - |  | 49,253,125 |  | - |  | - |  | - |  | 50,145,522 |
| Colombian peso |  | - |  | - |  | 2,963,022 |  | - |  | - |  | - |  | 2,963,022 |
| Czech koruna |  | 76 |  | - |  | 5,269,553 |  | - |  | - |  | - |  | 5,269,629 |
| Danish krone |  | 170,252 |  | 4,266 |  | 92,578,609 |  | - |  | - |  | - |  | 92,753,127 |
| Egyptian pound |  | 143,572 |  | - |  | 13,156,613 |  | - |  | - |  | - |  | 13,300,185 |
| Euro |  | 21,703,629 |  | 134,402,840 |  | 1,918,687,350 |  | 847,884 |  | 79,346,039 |  | 259,849,138 |  | 2,414,836,880 |
| Hong Kong dollar |  | 1,550,231 |  | - |  | 626,550,872 |  | 1,741 |  | 96,462,878 |  | - |  | 724,565,722 |
| Hungarian forint |  | 69,023 |  | - |  | 6,081,188 |  | - |  | - |  | - |  | 6,150,211 |
| Indian rupee |  | 1,036,403 |  | - |  | 99,757,342 |  | - |  | - |  | - |  | 100,793,745 |
| Indonesian rupiah |  | 170,244 |  | - |  | 34,656,290 |  | 6,743 |  | - |  | - |  | 34,833,277 |
| Israeli shekel |  | 219,206 |  | - |  | 41,805,246 |  | - |  | - |  | - |  | 42,024,452 |
| Japanese yen |  | 35,603,176 |  | - |  | 1,654,202,535 |  | - |  | 130,224,876 |  | - |  | 1,820,030,587 |
| Kenya shilling |  | 393,742 |  | - |  | 1,256,792 |  | - |  | - |  | - |  | 1,650,534 |
| Malaysian ringgit |  | 192,923 |  | - |  | 31,316,527 |  | - |  | - |  | - |  | 31,509,450 |
| Mexican peso |  | 674,904 |  | 15,811,369 |  | 65,112,707 |  | - |  | 1,113,492 |  | - |  | 82,712,472 |
| New Zealand dollar |  | 159,905 |  | 9,555,062 |  | 9,753,275 |  | 384,433 |  | - |  | - |  | 19,852,675 |
| Nigerian naira |  | 113 |  | - |  | 7,277,031 |  | - |  | - |  | - |  | 7,277,144 |
| Norwegian krone |  | 193,705 |  | - |  | 48,234,685 |  | - |  | 2,850,606 |  | - |  | 51,278,996 |
| Pakistani rupee |  | 690 |  | - |  | 2,241,152 |  | - |  | - |  | - |  | 2,241,842 |
| Peruvian nuevo sol |  | - |  | - |  | 1,002,939 |  | - |  | - |  | - |  | 1,002,939 |
| Philippine peso |  | 71,789 |  | - |  | 18,807,912 |  | - |  | - |  | - |  | 18,879,701 |
| Polish zloty |  | 329,207 |  | - |  | 21,139,314 |  | - |  | - |  | - |  | 21,468,521 |
| Pound sterling |  | 11,835,575 |  | 62,882,893 |  | 2,018,719,187 |  | - |  | 94,532,492 |  | 34,427 |  | 2,188,004,574 |
| Qatar riyal |  | - |  | - |  | 1,670,883 |  | - |  | - |  | - |  | 1,670,883 |
| Singapore dollar |  | 354,913 |  | - |  | 78,095,696 |  | 60,032 |  | 22,334,318 |  | - |  | 100,844,959 |
| South African rand |  | 160,974 |  | - |  | 166,634,517 |  | - |  | - |  | - |  | 166,795,491 |
| South Korean won |  | 95,234 |  | - |  | 400,981,589 |  | - |  | - |  | - |  | 401,076,823 |
| Swedish krona |  | 430,074 |  | - |  | 224,455,315 |  | - |  | 11,704,273 |  | - |  | 236,589,662 |
| Swiss franc |  | 1,838,075 |  | - |  | 591,026,391 |  | - |  | 8,055,908 |  | - |  | 600,920,374 |
| Taiwan dollar |  | 1,975,845 |  | - |  | 290,750,374 |  | - |  | - |  | - |  | 292,726,219 |
| Thai baht |  | 141,503 |  | - |  | 58,545,258 |  | 143,944 |  | 1,724,741 |  | - |  | 60,555,446 |
| Turkish lira |  | 69,928 |  | - |  | 67,714,231 |  | - |  | 1,319,652 |  | - |  | 69,103,811 |
| United Arab Emirates dirham |  | - |  | - |  | 13,830,108 |  | - |  | - |  | - |  | 13,830,108 |
| Total Subject to Foreign Currency Risk | \$ | \$86,726,862 | \$ | 234,619,255 | \$ | 9,627,626,725 | \$ | 1,559,741 | \$ | 548,615,111 | \$ | 259,883,565 | \$ | 10,759,031,259 |

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 exits and collateral held may potentially be insufficient to cover the principal due. PERS also held approximately $\$ 801.2$ million in To-Be- Announced (TBA) federal agency-issued mortgage pools. An additional $\$ 1,153.5$ million of debt instruments held are asset-backed securities backed primarily by automobiles, consumer credit receivables, heavy equipment leases, and student loan receivables.

## 7. Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. Policy states that no more than 25 percent of the fixed income manager positions may be invested in non-dollar denominated securities. Policies for the non-fixed portion of PERS' portfolio are silent regarding this risk. As of June 30, 2015, approximately 1.5 percent of the debt investment portfolio was invested in non-dollar denominated securities. (See Table 10.)

## 8. 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, 2015, the OPERF had $\$ 8,825.7$ million in commitments to purchase private equity investments, which includes $\$ 4,527.4$ million in recallable distributions, $\$ 2,529.1$ million in commitments to purchase real estate investments, $\$ 1,742.0$ million in commitments to purchase alternative equity investments, which includes $\$ 75.5$ million in recallable distributions, and $\$ 685.7$ million in commitments to purchase opportunity portfolio investments, which includes $\$ 153.9$ million in recallable distributions. These amounts are unfunded and are not recorded in the Statement of Fiduciary Net Position.

## C. Securities Lending

In accordance with state investment policies, OPERF participates in securities lending transactions. Through securities lending authorization agreements, the Oregon State Treasury has authorized its custodian, State Street Bank, to lend its securities pursuant to the terms and conditions of policy and applicable agreements. Both OPERF and the borrowers maintained the right to terminate all securities lending transactions on demand. There were no significant violations of the provisions of securities lending agreements during the period of these financial statements.
The custodian had the authority to loan short-term, fixed income, and equity securities and to receive as collateral U.S. dollar and foreign currency cash, U.S. government and agency securities, letters of credit, and foreign sovereign debt of Organization of Economic Cooperation and Development (OECD) countries. Borrowers were required to deliver collateral for each loan equal to not less than 102 percent of the market value of loaned U.S. securities and international fixed income securities, or 105 percent
in the case of international equity. The custodian did not have the ability to pledge or sell collateral securities absent a borrower default, and OPERF did not impose any restrictions during the fiscal year on the amount of the loans the custodian made on its behalf. OPERF is fully indemnified against losses due to borrower default by its current custodian. There were no losses during the year from the failure of borrowers to return loaned securities and no recoveries of amounts from prior losses.

Prior to July 1, 2010, OPERF was a participant in a securities lending collateral reinvestment pool managed by State Street Global Advisors ("SSgA"), a division of State Street Bank. On July 1, 2010, OPERF withdrew from this pool and directed SSgA to allocate its share of pool assets into a new legacy fund owned exclusively by OPERF. At the same time OPERF also directed SSgA to open a new securities lending collateral reinvestment fund for ongoing lending activities. The legacy fund will be maintained until all existing assets have matured or been sold, and proceeds will be invested in the new fund. Since the assets in the legacy and new funds are wholly owned by OPERF, the balances in the funds are stated at fair value in the Statements of Fiduciary Net Position as of June 30, 2015. 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, 2015, is effectively one day. On June 30, 2015, OPERF had no credit risk exposure to borrowers because the amounts OPERF owes borrowers exceed the amounts borrowers owe OPERF.
On June 30, 2015, the fair value of cash collateral received and invested cash collateral were $\$ 1,666.9$ million and $\$ 1,664.5$ million, respectively. The cumulative unrealized loss in invested cash collateral of $\$ 2.3$ 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, 2015, total income from securities lending activity was $\$ 15.9$ million, and total expenses for the period were $\$ 3.7$ million for a net gain of $\$ 12.2$ million.
OSTF also participates in securities lending activity. OPERF receives an allocated portion of this activity based on its deposits in OSTF. As of June 30, 2015, OPERF's allocated portion of cash collateral received and invested cash collateral were $\$ 13.4$ million and $\$ 13.4$ 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

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OSTF's participation in securities lending activity, refer to their audited financial statements at: http://sos.oregon.gov/ audits/Documents/2015-22.pdf.
Table 11 on below 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, 2015, is shown in Table 12 below. Securities lending collateral subject to interest rate risk as of June 30, 2015, is shown in Table 13 on page 47.

## 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.

TABLE 11

| Investment Type | Securities on Loan at Fair Value |  | Cash and Securities Collateral Received |  | Investments of Cash Collateral at Fair Value |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. Treasury Securities | \$ | 218,692,719 | \$ | 223,109,032 | \$ | 163,800,679 |
| U.S. Agency Securities |  | 30,234,868 |  | 30,819,250 |  | 21,559,056 |
| Domestic Equity Securities |  | 1,145,098,243 |  | 1,165,173,557 |  | 973,802,302 |
| Domestic Debt Securities |  | 233,145,009 |  | 237,155,603 |  | 150,282,240 |
| International Equity Securities |  | 727,519,601 |  | 771,614,542 |  | 350,050,121 |
| International Debt Securities |  | 7,905,215 |  | 5,092,491 |  | 5,085,601 |
| Allocation from Oregon Short Term Fund |  | 21,685,621 |  | 22,141,300 |  | 13,416,587 |
| Total | \$ | 2,384,281,276 | \$ | 2,455,105,775 | \$ | 1,677,996,586 |

TABLE 12
Securities Lending Invested Cash Collateral Subject to Credit Risk at June 30, 2015

| Quality Rating | Fair Value |
| :--- | ---: |
| AAA | $191,611,127$ |
| AA | $220,427,504$ |
| A $^{1}$ | $1,247,680,883$ |
| BBB | 579,421 |
| CCC | $3,884,145$ |
| Total Subject to Credit Risk | $\mathbf{1 , 6 6 4 , 1 8 3 , 0 8 0}$ |
| Allocation from Oregon Short Term Fund |  |
| Cash and Receivables | $13,416,587$ |
| Total Securities Lending Invested Cash Collateral | $\mathbf{\$ 1 , 6 7 7 , 9 9 6 , 9 1 9}$ |
| ${ }^{1}$ Commercial paper ratings of A-1+/A-1/P-1 categorized as A. |  |

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 26 and 27. 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 28 and 29 .

TABLE 13
Securities Lending Invested Cash Collateral Subject to Interest Rate Risk at June 30, 2015

| Security Type | Fair Value |  | Effective <br> Weighted Duration Rate (in days) ${ }^{1}$ |
| :---: | :---: | :---: | :---: |
| Asset-Backed Securities | \$ | 296,841,513 | 22 |
| Bank Note |  | 177,013,084 | 37 |
| Certificates of Deposit |  | 88,993,705 | 42 |
| Commercial Paper |  | 260,444,984 | 42 |
| Corporate Bonds |  | 175,821,854 | 29 |
| Repurchase Agreements |  | 481,575,000 | 2 |
| U.S. Government \& Agencies |  | 183,492,940 | 44 |
| Total Subject to Interest Rate Risk |  | 1,664,183,080 | 25 |
| Allocation from Oregon Short Term Fund |  | 13,416,587 |  |
| Cash and Receivables |  | 396,919 |  |
| 1 Total Securities Lending Invested Cash Collateral | \$ | 1,677,996,586 |  |
| ${ }^{1}$ Weighted average days to maturity or next reset date. |  |  |  |

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Table 14 below presents the related net appreciation/ (depreciation) in fair value amounts and the notional amounts of derivative instruments outstanding as of June 30, 2015.

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

TABLE 14

| Derivative Instruments as of June 30, 2015 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Derivatives | Net Appr (Deprecia Fair Value of Inv | ciation/ tion) in estments ${ }^{(1)(4)}$ | Classification | Fair Value ${ }^{(2)}$ | Notional Value ${ }^{(3)}$ |
| Credit Default Swaps Bought | \$ | $(1,119,249)$ | Public Equity | \$ (2,829,204) | \$ 200,838,000 |
| Credit Default Swaps Written |  | $(826,494)$ | Public Equity | 953,198 | 46,796,818 |
| Fixed Income Futures Long |  | 46,563,518 | Public Equity | - | 2,684,874,088 |
| Fixed Income Futures Short |  | (22,768,302) | Public Equity | - | $(1,069,690,275)$ |
| Fixed Income Options Bought |  | 411,712 | Public Equity | 526,168 | 44,440,000 |
| Fixed Income Options Written |  | 614,594 | Public Equity | $(3,785,271)$ | $(165,214,969)$ |
| Foreign Currency Options Bought |  | 26,614 | Public Equity | 73,418 | 6,428,934 |
| Foreign Currency Options Written |  | 4,694 | Public Equity | $(19,550)$ | $(6,428,934)$ |
| Futures Options Bought |  | $(1,608,371)$ | Public Equity | 53,309 | 4,101,000 |
| Futures Options Written |  | 3,311,939 | Public Equity | $(575,222)$ | $(5,729,500)$ |
| Foreign Exchange Forwards |  | 105,012,047 | Public Equity | 7,698,151 | 3,021,440,025 |
| Index Futures Long |  | 60,855,955 | Public Equity | - | 5,407,905 |
| Index Futures Short |  | $(7,578,175)$ | Public Equity | - | $(162,045)$ |
| Index Options Bought |  | $(23,439)$ | Public Equity | - | - |
| Index Options Written |  | 194,580 | Public Equity | - | - |
| Pay Fixed Interest Rate Swaps |  | $(799,288)$ | Public Equity | 816,985 | 488,745,793 |
| Receive Fixed Interest Rate Swaps |  | 1,801,718 | Public Equity | $(713,257)$ | 134,277,217 |
| Rights |  | 326,227 | Public Equity | 697,171 | 5,587,464 |
| Total Return Swaps Equity |  | 39,086,262 | Public Equity | - | - |
| Warrants |  | 1,305,495 | Public Equity | 1,496,721 | 12,558,048 |
| Total | \$ | 224,812,037 |  | \$ 4,392,617 | \$ 5,408,269,569 |

(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 and options, negative values refer to short positions.
(4) Excludes futures margin payments.
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 15 below presents a summary of counterparty credit ratings relating to derivative instruments as of June 30, 2015.

TABLE 15

| Derivative Instruments Subject to Counterparty Credit Risk as of June 30, 2015 |
| :--- | :---: | :---: | :---: | :---: |

## Oregon Public Employees Retirement System

## Interest Rate Risk

As of June 30, 2015, OPERF is exposed to interest rate risk on its various swap arrangements and options. Table 16 below presents a segmented time schedule of those instru-
ments and Table 17 below shows a schedule of derivative instruments that were highly sensitive to interest rate changes.

TABLE 16
Derivative Instruments Subject to Interest Rate Risk as of June 30, 2015

| Investment Type | Fair Value |  | Investment Maturities (in years) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Less Than 1 |  | 1-5 |  | 6-10 |  | More than 10 |  |
| Credit Default Swaps Bought | \$ | $(2,829,204)$ | \$ | $(6,691)$ | \$ | $(2,822,512)$ | \$ | - | \$ | - |
| Credit Default Swaps Written |  | 953,198 |  | - |  | 935,191 |  | 18,872 |  | (865) |
| Fixed Income Options Bought |  | 526,168 |  | 526,168 |  | - |  | - |  | - |
| Fixed Income Options Written |  | $(3,785,271)$ |  | $(816,909)$ |  | $(2,968,362)$ |  | - |  | - |
| Pay Fixed Interest Rate Swaps |  | 816,985 |  | - |  | $(503,917)$ |  | 350,202 |  | 970,700 |
| Receive Fixed Interest Rate Swaps |  | $(713,257)$ |  | - |  | $(455,164)$ |  | $(275,449)$ |  | 17,355 |
| Total | \$ | $(5,031,381)$ | \$ | $(297,432)$ | \$ | $(5,814,764)$ | \$ | 93,625 | \$ | 987,190 |

TABLE 17
Derivative Instruments Highly Sensitive to Interest Rate Changes as of June 30, 2015

| Investment Type | Reference Rate | Fair Value |  | Notional Value |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.0425\% | \$ | 21,896 | \$ | 24,730,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.8885\% |  | $(639,639)$ |  | 14,340,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.817\% |  | $(391,384)$ |  | 10,200,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.247\% |  | $(96,053)$ |  | 6,020,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 3.04562\% |  | $(105,759)$ |  | 4,000,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 3.06488\% |  | $(113,932)$ |  | 3,800,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.05\% |  | 1,283,107 |  | 38,800,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month Australian BBSW, Pay Fixed 2.14\% |  | 34,592 |  | 66,737,532 |
| Pay Fixed Interest Rate Swaps | Receive Variable 6-month Canadian BA, Pay Fixed 0.9725\% |  | $(74,822)$ |  | 52,505,106 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.42321\% |  | 81,998 |  | 765,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.38012\% |  | 93,506 |  | 805,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.42063\% |  | 88,872 |  | 825,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.39211\% |  | 885,294 |  | 9,042,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 12-month Brazilian CDI, Pay Fixed 12.27\% |  | 206,366 |  | 18,220,448 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.39069\% |  | 89,204 |  | 805,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 1.65\% |  | 90,294 |  | 30,600,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month New Zealand BBR, Pay Fixed 3.3675\% |  | $(403,504)$ |  | 80,784,021 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.4855\% |  | $(18,899)$ |  | 6,030,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month Australian BBSW, Pay Fixed 2.2\% |  | $(9,330)$ |  | 58,613,430 |
| Pay Fixed Interest Rate Swaps | Receive Variable 6-month GBP LIBOR, Pay Fixed 2.393\% |  | $(21,748)$ |  | 3,224,036 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.488\% |  | $(15,191)$ |  | 4,520,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 6-month Canadian BA, Pay Fixed 1.05375\% |  | $(141,147)$ |  | 48,564,220 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 2.95803\% |  | $(12,298)$ |  | 3,080,000 |
| Pay Fixed Interest Rate Swaps | Receive Variable 3-month LIBOR, Pay Fixed 3.465\% |  | $(14,438)$ |  | 1,735,000 |
| Subtotal - Pay Fixed Interest Rate Swaps |  |  | 816,985 |  | 488,745,793 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 2.6275\%, Pay Variable 3-month LIBOR |  | 129,938 |  | 5,850,000 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 1.71\%, Pay Variable 3-month LIBOR |  | $(381,678)$ |  | 16,600,000 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 2.9725\%, Pay Variable 6-month Australian BBSW |  | $(306,221)$ |  | 10,145,519 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 13.16\%, Pay Variable 12-month Brazilian CDI |  | $(341,111)$ |  | 39,048,416 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 3.384\%, Pay Variable 6-month Australian BBSW |  | 22,520 |  | 6,356,321 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 4.07\%, Pay Variable 3-month New Zealand BBR |  | 259,992 |  | 18,828,189 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 1.6435\%, Pay Variable 6-month GBP LIBOR |  | $(114,052)$ |  | 34,693,772 |
| Receive Fixed Interest Rate Swaps | Receive Fixed 3.36\%, Pay Variable 3-month LIBOR |  | 17,355 |  | 2,755,000 |
| Subtotal - Receive Fixed Interest Rate Swaps |  |  | $(713,257)$ |  | 134,277,217 |
| Total Interest Rate Swaps |  | \$ | 103,728 | \$ | 623,023,010 |

## Foreign Currency Risk

OPERF is exposed to foreign currency risk on its derivative instruments. Table 18 below presents a summary of
derivative instruments subject to foreign currency risk as of June 30, 2015.

## TABLE 18

Derivative Instruments Subject to Foreign Currency Risk as of June 30, 2015

| Currency | Currency Forward Contracts |  |  |  | Options |  | Swaps |  | Total Exposure |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net Receivables |  | Net Payables |  |  |  |  |  |  |  |
| Australian dollar | \$ | (1,264,271) | \$ | 393,829 | \$ | 85,664 | \$ | $(258,440)$ | \$ | $(1,043,218)$ |
| Brazilian real |  | 44,295 |  | $(285,525)$ |  | - |  | $(134,745)$ |  | $(375,975)$ |
| Canadian dollar |  | $(1,719,248)$ |  | 739,720 |  | - |  | $(215,969)$ |  | $(1,195,497)$ |
| Danish krone |  | 7,919 |  | 6,693 |  | - |  | - |  | 14,612 |
| Euro |  | $(2,205,192)$ |  | 12,054,847 |  | $(216,796)$ |  | 276,115 |  | 9,908,974 |
| Hong Kong dollar |  | 487 |  | $(1,360)$ |  | 1,741 |  | - |  | 868 |
| Indonesian rupiah |  | 1,276 |  | $(46,196)$ |  | 6,743 |  | - |  | $(38,177)$ |
| Japanese yen |  | 4,504,507 |  | 661,079 |  | - |  | - |  | 5,165,586 |
| New Israeli sheqel |  | 131,276 |  | $(369,581)$ |  | - |  | - |  | $(238,305)$ |
| New Zealand dollar |  | $(2,121,174)$ |  | 2,377,703 |  | - |  | $(143,512)$ |  | 113,017 |
| Norwegian krone |  | $(444,602)$ |  | 425,696 |  | - |  | - |  | $(18,906)$ |
| Pound sterling |  | 2,926,305 |  | $(8,643,839)$ |  | - |  | $(135,800)$ |  | $(5,853,334)$ |
| Singapore dollar |  | 50,995 |  | $(8,298)$ |  | 60,032 |  | - |  | 102,729 |
| South Korean won |  | - |  | 89,140 |  | - |  | - |  | 89,140 |
| Swedish krona |  | $(90,122)$ |  | $(200,403)$ |  | - |  | - |  | $(290,525)$ |
| Swiss franc |  | 160,295 |  | 521,900 |  | - |  | - |  | 682,195 |
| Thailand baht |  | - |  | - |  | 143,944 |  | - |  | 143,944 |
| Total Subject to Foreign Currency Risk |  | $(17,254)$ |  | 7,715,405 |  | 81,328 |  | $(612,351)$ |  | 7,167,128 |
| U.S. dollar |  | - |  | - |  | $(1,614,584)$ |  | $(1,159,927)$ |  | $(2,774,511)$ |
| Total | \$ | $(17,254)$ | \$ | \$7,715,405 | \$ | (1,533,256) | \$ | $(1,772,278)$ | \$ | 4,392,617 |

## Oregon Public Employees Retirement System

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 19 below.)

TABLE 19

| Schedule of Capital Assets as of June 30, 2015 | Beginning of Year |  | Increases |  | Decreases |  | End of Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital Assets |  |  |  |  |  |  |  |  |
| Furniture and Equipment | \$ | 1,116,331 | \$ | 480,901 | \$ | $(42,883)$ | \$ | 1,554,349 |
| Data Processing Software |  | 40,159,618 |  | 171,805 |  | - |  | 40,331,423 |
| Data Processing Hardware |  | 2,427,707 |  | 587,473 |  | $(974,275)$ |  | 1,982,885 |
| Building and Building Improvements |  | 8,577,867 |  | 39,766 |  | - |  | 8,617,633 |
| Land |  | 944,463 |  | - |  | - |  | 944,463 |
| Total Capital Assets |  | 53,225,986 |  | 1,279,945 |  | $(1,075,179)$ |  | 53,430,753 |
| Less Accumulated Depreciation |  |  |  |  |  |  |  |  |
| Furniture and Equipment |  | $(690,244)$ |  | $(182,534)$ |  | 42,883 |  | $(829,895)$ |
| Data Processing Software |  | $(11,595,015)$ |  | $(1,858,593)$ |  | - |  | $(13,453,608)$ |
| Data Processing Hardware |  | $(1,392,946)$ |  | $(288,153)$ |  | 908,381 |  | $(772,718)$ |
| Building and Building Improvements |  | $(3,254,024)$ |  | $(269,743)$ |  | - |  | $(3,523,767)$ |
| Total Accumulated Depreciation |  | $(16,932,229)$ |  | $(2,599,023)$ |  | 951,264 |  | $(18,579,988)$ |
| Capital Assets, Net | \$ | 36,293,757 | \$ | (1,377,098) | \$ | $(65,894)$ | \$ | 34,850,765 |
| Depreciation Expense |  |  |  | Amount |  |  |  |  |
| Defined Benefit Pension Plan Depreciation |  |  | \$ | 2,576,791 |  |  |  |  |
| Oregon Public Service Retirement Plan |  |  |  |  |  |  |  |  |
| Individual Account Program Depreciation |  |  |  | 22,232 |  |  |  |  |
| Total Depreciation Expense |  |  | \$ | 2,599,023 |  |  |  |  |

TABLE 20

| PERS Building Debt Service Requirements to Maturity |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | Series "K" |  |  |  | Total |  |
|  |  | Principal |  |  |  |  |
| 2016 | \$ | 585,000 | \$ | 60,000 | \$ | 645,000 |
| 2017 |  | 615,000 |  | 30,750 |  | 645,750 |
| Total | \$ | 1,200,000 | \$ | 90,750 | \$ | 1,290,750 |

## 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, 2015, is $\$ 1,200,000$ and has a final repayment due May $1,2017$.

Table 20 on the previous page summarizes all future PERS building bond payments of principal and interest for each fiscal year during the next two-year period ending June 30, 2017. The current portion of the PERS building debt is $\$ 585,000$.

Table 21 below summarizes the changes in long-term debt for the year ended June 30, 2015.

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

## A. Member Reserve

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

## B. Employer Contribution Designation

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

## C. Benefit Reserve

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

## D. Tier One Rate Guarantee Reserve

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

The regular account for Tier One members and alternate payees of those members cannot be credited with earnings in excess of the assumed interest rate until:
(a) the reserve is fully funded with amounts determined by the Board, after consultation with the actuary employed by the Board, necessary to ensure a zero balance in the reserve when all Tier One members and alternate payees of those members have retired; and
(b) the reserve has been fully funded as described in paragraph (a) of this subsection in each of the three immediately preceding calendar years.

TABLE 21

| Long-Term Debt Activity |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Balance <br> ne 30, 2014 | Additions |  | Deductions |  | $\begin{gathered} \text { Balance } \\ \text { June 30, } 2015 \end{gathered}$ |  | Amounts Due Within One Year |  |
| PERS Building Principal | \$ | 1,765,000 | \$ | - | \$ | $(565,000)$ | \$ | 1,200,000 | \$ | $(615,000)$ |
| Plus: Premium (Net) |  | 178,191 |  | - |  | $(62,780)$ |  | 115,411 |  | $(62,952)$ |
| Total Bonds Payable | \$ | 1,943,191 | \$ | - | \$ | $(627,780)$ | \$ | 1,315,411 | \$ | $(677,952)$ |

TABLE 22

| Reserves and Designations | Defined Benefit Pension Plan |
| :--- | ---: |
| Chapter 238 Defined Benefit Plan and Employee Benefit Plan |  |
| Member Reserve | $\$$ |
| Employer Contribution Designation | $6,125,844,975$ |
| Benefit Reserve | $27,654,809,546$ |
| Tier One Rate Guarantee Reserve | $21,100,808,243$ |
| Supplementary Payments Reserve | $434,214,127$ |
| Contingency Reserve | $55,199,362$ |
| Employer Contingency Reserve | $571,002,782$ |
| Unallocated Earnings Allocation | $25,000,000$ |
| OPSRP Defined Benefit Program | $6,700,603,708$ |
|  | $2,256,143,351$ |
| Net Position Restricted for Pension Benefits |  |
|  |  |

## Oregon Public Employees Retirement System

## E. Supplemental Payments Reserve

The Supplemental Payment Reserve was established by the Board to implement the provisions of Senate Bill 861, for PERS benefit recipients who retired on or before July 1, 2014. On April 30, 2015, the Oregon Supreme Court declared Senate Bill 861 unconstitutional. In fiscal year 2016, PERS will return the funds in the Supplemental Payments Reserve to the Contingency Reserve.

## F. 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.

## G. 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.

## H. 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.

## I. 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

## J. 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, 2015, the balance of this account was $\$ 422.9$ 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.

## K. 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, 2015, the balance of this account was $\$ 8.8$ 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

## L. 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, 2015, the balance of this account was $\$ 1,539.9$ million. The Internal Revenue Code (IRC) limits plan member contributions to an IRC 457 account to a maximum of $\$ 18,000$ (for calendar year 2015), 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, 2015, the balance of this account was $\$ 54.8$ million.

## Note 8 - Litigation

Everice Moro et al v. State of Oregon et al
On April 30, 2015, the Oregon Supreme Court declared Senate Bills 822 and 861 unconstitutional in so far as they affect retirement benefits earned before May 6, 2013.
Senate Bill 822 was enacted during the 2013 Oregon regular legislative session to lower the cap on the cost-ofliving adjustment (COLA) from 2 percent to 1.5 percent, and eliminate the tax remedy benefit for recipients who do not pay Oregon state income taxes because they do not reside in Oregon. The tax remedy benefit portion of Senate Bill 822 was upheld by the Oregon Supreme Court. Senate Bill 861 was enacted during a special legislative session in September 2013, and modified subsequent yearly COLAs for all PERS benefit recipients.
The decision reduced PERS' funded status and negated a large portion of the cost savings for PERS employers that were factored into 2015-17 contribution rates. The potential financial impact of this decision increases the present value of future benefits by $\$ 5.1$ billion. PERS has executed a project to restore COLA payments to benefit recipients and enhance its systems to implement the new COLA allocation going forward.

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 government.

## 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, 2015, using a variety of actuarial and statistical techniques and adjusted for actual experience to produce current estimates that reflect recent settlements, claim frequency, and other economic and social factors. Adjustments to claims liabilities are charged or credited to expense in the periods in which they are made. The estimated claims liability of $\$ 14.8$ 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, 2015, but have not been reported to the SRHIA. Table 23 below shows the changes in the aggregated estimated claims liabilities as of June 30, 2015 and 2014.
B. Pension Assets, 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 asset has been allocated to the state of Oregon's proprietary funds, including SRHIA. At June 30, 2015, SRHIA reported an asset of $\$ 43,819$ for its proportionate share of the net pension asset. The net pension asset was measured as of June 30,2014 , and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2012 rolled forward to June 30, 2014. SRHIA's proportion of the net pension asset 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, 2015, SRHIA's proportionate share of the statewide pension plan was 0.00814712 percent.

For the year ended June 30, 2015, SHRIA recognized a pension credit of $\$ 40,054$. Table 24 below show the amounts SRHIA reported as deferred outflows of resources and deferred inflows of resources related to pensions from the following sources at June 30, 2015.

TABLE 23

| Changes in the Aggregated Estimated Claims Liabilities of SRHIA |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| For the Year Ended June 30 |  |  |  |  |
|  | 2015 |  | 2014 |  |
| Total Estimated Claims at |  |  |  |  |
| Beginning of Fiscal Year | \$ | 14,492,000 | \$ | 14,090,000 |
| Insured Claims and Claim Adjustment Expenses |  |  |  |  |
| Provision for Insured Events of Current Fiscal Year |  | 208,932,020 |  | 177,040,393 |
| Increase/(Decrease) in Provision for Insured Events of Prior Years |  | 3,278,093 |  | $(1,627,770)$ |
| Total Incurred Claims and Claim Adjustment Expenses |  | 212,210,113 |  | 175,412,623 |
| Payments |  |  |  |  |
| Claims and Claim Adjustment Expenses |  |  |  |  |
| Attributable to Insured Events of Current Fiscal Year |  | 194,134,020 |  | 162,548,393 |
| Claims and Claim Adjustment Expenses |  |  |  |  |
| Attributable to Insured Events of Prior Fiscal Year |  | 17,770,093 |  | 12,462,230 |
| Total Payments |  | 211,904,113 |  | 175,010,623 |
| Total Estimated Claims at End of Fiscal Year | \$ | 14,798,000 | \$ | 14,492,000 |

TABLE 24
Deferred Outflow of Resources and Deferred Inflow of Resources
For the Year Ended June 30, 2015

|  | Deferred Outflow of Resources |  | Deferred Inflow of Resources |  |
| :---: | :---: | :---: | :---: | :---: |
| Differences between expected and actual experience | \$ | - | \$ | - |
| Changes in assumptions |  | - |  | - |
| Net difference between projected and actual earnings on investments |  | - |  | 84,553 |
| Changes in proportion and differences between fund contributions and proportionate share of contributions |  | 784 |  | - |
| Contributions subsequent to the measurement date |  | 15,434 |  | - |
| Total | \$ | 16,218 | \$ | 84,553 |

## Oregon Public Employees Retirement System

The deferred outflows of resources totaling \$15,434 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 25 below 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 as follows:

TABLE 25

| Deferred Outflow of Resources and Deferred Inflow of Resources |  |
| :--- | ---: |
| Will be Recognized in Pension Expenses as follows: |  |
|  |  |
| Year ended June 30: | Pension Expense |
| 2016 | $\$$ |
| 2017 | $(20,968)$ |
| 2018 | $(20,968)$ |
| 2019 |  |
| 2020 | $(20,968)$ |
| Thereafter |  |
| Total |  |
|  |  |

## Note 10 - 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 26 below.

TABLE 26

| Net Pension Liability (in Millions) |  |  |
| :---: | :---: | :---: |
| As of June 30, 2015 |  |  |
|  | 2015 |  |
| Total Pension Liability | \$ | 70,665.1 |
| Plan Fiduciary Net Position |  | 64,923.6 |
| Employers' Net Pension Liability | \$ | 5,741.5 |
| Plan net position as a percentage of total pension liability |  | 91.9\% |

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 as of the December 31, 2013 valuation rolled forward to June 30, 2015.

The Oregon Supreme Court decision in Moro v. State of Oregon (issued on April 30, 2015) occurred after the December 31, 2013 valuation date but affected the plan provisions reflected for financial reporting purposes. The Moro
decision modified the COLA-related changes of Senate Bills 822 and 861 to only apply for benefits earned after the dates of the legislation. Due to the timing of the Supreme Court decision, the COLA change due to Moro is reflected in the June 30, 2015 Total Pension Liability, but was not reflected in the June 30, 2014 Total Pension Liability.

Key actuarial methods and assumptions used to measure the total pension liability are illustrated in Table 27 on the next page.

## Discount Rate

The discount rate used to measure the total pension liability was 7.75 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 28 on the next page presents the net pension liability calculated using the discount rate of 7.75 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is one percent lower ( 6.75 percent) or one percent higher ( 8.75 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 82.

## 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 2013 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 29 on the next page 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.

TABLE 27

| $\underline{\text { Actuarial Methods and Assumptions }}$ |  |
| :---: | :---: |
|  | Pension |
| Valuation date | December 31, 2013 |
| Measurement date | June 30, 2015 |
| Experience Study | 2014, published September 2015 |
| Actuarial cost method | Entry Age Normal |
| Actuarial assumptions: |  |
| Inflation rate | 2.75 percent |
| Long-term expected rate of return | 7.75 percent |
| Discount rate | 7.75 percent |
| Projected salary increases | 3.75 percent |
| Cost of living adjustments (COLA) | Blend of $2.00 \%$ COLA and graded COLA ( $1.25 \% / 0.15 \%$ ) in accordance with Moro decision; blend based on service. |
| Mortality | Healthy retirees and beneficiaries: <br> RP-2000 Sex-distinct, generational per Scale AA, with collar adjustments and set-backs as described in the valuation. <br> Active members: <br> Mortality rates are a percentage of healthy retiree rates that vary by group, as described in the valuation. <br> Disabled retirees: <br> Mortality rates are a percentage ( $65 \%$ for males, $90 \%$ for females) of the RP-2000 static combined disabled mortality sexdistinct table. |

TABLE 28
Sensitivity of Net Pension/Liability to Changes in the Discount Rate (in Millions) As of June 30, 2015

| Employers' Net Pension Liability/(Asset) | 1\% Decrease <br> $(\mathbf{6 . 7 5 \%})$ | Current <br> Discount <br> Rate (7.75\%) | 1\% Increase <br> $\mathbf{( 8 . 7 5 \% )}$ |
| :--- | :---: | :---: | :---: | :---: |
| Defined Benefit Pension Plan | $\$ 13,856.8$ | $\$ 5,741.5$ | $\$(1,097.6)$ |

TABLE 29

|  |  | Annual <br> Asset Class <br> Allocation* | Compound Annual <br> Arithmetic <br> Return | (Geometric) <br> Return |
| :--- | :---: | :---: | :---: | :---: |

## Oregon Public Employees Retirement System

## 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 $100 \%$ 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 30 on the next page. Actuarial methods and assumptions of each postemployment healthcare plan used in the actuarial valuation dated December 31, 2011, to determine contribution rates for the year ended June 30, 2015, and in the most recent actuarial valuation dated December 31, 2014, are illustrated in Table 31 on the next page.
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.

## Note 12 - Subsequent Events

At its July 31, 2015 meeting, the PERS Board lowered the "assumed rate" to $7.5 \%$ effective, January 1, 2016.
The assumed rate is the rate of investment return (including inflation) that PERS Fund's plans are expected to earn over the long term. Oregon Administrative Rule 459-0070001 (2) states that the assumed rate "means the actuarial assumed rate of return on investments as adopted by the Board for the most recent actuarial valuation."

The PERS Board decides on the assumed rate based on:

- The long-term projection of investment returns based on the asset allocations of the Oregon Investment Council and the related capital market expectations, and
- Independent analysis by PERS' actuary, Milliman, of the projected returns from that asset allocation, over a longterm investment horizon.

The current assumed rate is $7.75 \%$ and has been in effect since January 1, 2014. The assumed rate is reviewed and adopted by the PERS Board every two years as part of the system's Experience Study.
The assumed rate is used when crediting Tier One regular accounts with annual earnings. Statute dictates that Tier One accounts must be credited with the assumed rate each year. The assumed rate is the long-term rate of return used by the System's actuary to measure the total pension liability in accordance with GASB 67, and the rate itself is subject to change every two years. Beginning in calendar year 2016, Tier One annual earnings will be credited based on the new rate of $7.5 \%$.

The assumed rate is also used to credit pro-rated earnings to a Tier One member's regular account upon retirement or a withdrawal, so those earnings will also be pro-rated at the new assumed rate.

When a Tier One or Tier Two member retires, his/her account is annuitized based on the assumed rate. The change in the assumed rate means using new actuarial equivalency factors (AEFs) to calculate a retirement benefit. A member would need to retire no later than December 1,2015 to have the current assumed rate used at retirement. This change will have the biggest effect on Money Match and Formula Plus Annuity benefit calculations. AEFs are based on two primary variables:

1) expected member longevity (how long members are expected to live), and
2) the assumed earnings rate (how much the member's account balance will earn during retirement).

The assumed rate also is used to discount system liabilities when setting employer rates. With the earnings assumption being lowered, the amount that must be contrib-
uted by employers will increase to cover the reduced earnings projection. Employer contribution rates are based on the balance in the employer's reserve earning the assumed rate in the future; because the assumed rate is changing, employer contribution rates will change to reflect the different future earnings assumption. The rate changes will become effective with the next rate setting valuation (e.g., the 2017-19 biennium).

TABLE 30 (dollar amounts in millions)

| Funded Status-OPEB Plans ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial Valuation Date |  | Actuarial Value of Assets (a) |  | Actuarial Accrued Liability (AAL) <br> (b) |  | unded <br> (UAAL) <br> - a) | Funded Ratio (a/b) |  | Covered Payroll (c) | UAAL as a \% of Covered Payroll ((b-a)/c) |
| RHIA |  |  |  |  |  |  |  |  |  |  |
| 12/31/2014 | \$ | 395.9 | \$ | 468.4 | \$ | 72.5 | 84.5\% | \$ | 9,115.8 | 0.8\% |
| RHIPA |  |  |  |  |  |  |  |  |  |  |
| 12/31/2014 |  | 7.2 |  | 70.5 |  | 63.3 | 10.2 |  | 2,718.9 | 2.3 |
| Note: Discrepancies with the actuarial valuation are the result of rounding differences. |  |  |  |  |  |  |  |  |  |  |

TABLE 31


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Required Supplementary Information
Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios (Unaudited)
Defined Benefit Pension Plan
For the Year Ended June 30 ${ }^{1}$
(Amounts in millions)

|  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability |  |  |  |  |
| Service Cost | \$ | 960.9 | \$ | 1,020.3 |
| Interest on Net Pension Liability |  | 4,779.5 |  | 4,819.5 |
| Changes in Benefit Terms |  | 5,353.5 |  | $(2,423.6)$ |
| Differences Between Expected and Actual Experience |  | 380.0 |  | - |
| Changes in Assumptions |  | - |  | - |
| Benefit Payments |  | $(3,943.6)$ |  | $(3,863.4)$ |
| Refunds of Member Accounts |  | - |  | - |
| Net Change in Total Pension Liability |  | 7,530.3 |  | (447.3) |
| Total Pension Liability - Beginning |  | 63,134.8 |  | 63,582.1 |
| Total Pension Liability - Ending | \$ | 70,665.1 | \$ | 63,134.8 |
| Plan Fiduciary Net Position |  |  |  |  |
| Employer Contributions |  | 1,123.3 |  | 915.2 |
| Member Contributions |  | 13.8 |  | 15.3 |
| Net Investment Income |  | 2,364.5 |  | 9,886.7 |
| Benefit Payments |  | $(3,927.2)$ |  |  |
| Refunds of Member Accounts |  | (16.5) |  | $(3,863.4)$ |
| Adminstrative Expense |  | (35.7) |  | (31.2) |
| Net Change in Plan Fiduciary Net Position |  | (477.8) |  | 6,922.6 |
| Plan Fiduciary Net Position - Beginning |  | 65,401.4 |  | 58,478.9 |
| Plan Fiduciary Net Position - Ending | \$ | 64,923.6 | \$ | 65,401.5 |
| Net Pension (Asset)/Liability |  | 5,741.5 | \$ | $(2,266.7)$ |
| Plan Fiduciary Net Position as a Percentage of the Total Pension Liability |  | 91.9 \% |  | 103.6 \% |
| Covered-Employee Payroll ${ }^{2}$ |  | 9,000.2 |  | 8,701.7 |
| Employer Net Pension Asset as a Percentage of Covered-Employee Payroll |  | 63.8 \% |  | (26.0) \% |

## Required Supplementary Information

Schedule of Investment Returns (Unaudited)
Defined Benefit Pension Plan
For the Year Ended June 30 ${ }^{1}$

|  | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 4}$ |
| :---: | :---: | :---: |
| Annual Money-Weighted Rate of Return <br> Net of Investment Expense | $3.7 \%$ | $17.2 \%$ |

[^0]
## Oregon Public Employees Retirement System

## Required Supplementary Information <br> Schedule of Defined Benefit Pension Plan Contributions ${ }^{4}$ (Unaudited)

Last 10 Fiscal Years
(Dollar amounts in thousands)

|  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contributions ${ }^{1}$ | \$ | 909,912 | \$ | 866,635 | \$ | 781,015 | \$ | 774,461 | \$ | 361,655 |
| Contributions in relation to the actuarially determined contributions ${ }^{2}$ |  | 909,912 |  | 866,635 |  | 781,015 |  | 774,461 |  | 361,655 |
| Contribution deficiency (excess) |  | - | \$ | - | \$ | - | \$ | - | \$ |  |
| Covered-employee payroll ${ }^{3}$ | \$ | 9,000,246 | \$ | 8,701,657 | \$ | 8,280,731 | \$ | 8,650,799 | \$ | 8,618,636 |
| Contributions as a percentage of coveredemployee payroll |  | 10.11\% |  | 9.96\% |  | 9.43\% |  | 8.95\% |  | 4.20\% |

${ }^{1}$ 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 contribution on the Statement of Changes in Fiduciary Net Position includes interest related to employer-specific liabilities and employers' optional supplemental contributions.
${ }^{3}$ GASB 68 defines covered-employee payroll as the total payroll of employees that are provided pensions through the pension plan. Covered-employee payroll
in this schedule is based on subject salary provided by participating employers.
4 For Acturaial Assumptions and Methods, see table below.

| Actuarial Assumptions and Methods used to Actuarially Determine Contributions |  |  |  |
| :--- | :---: | :---: | :---: |
| Actuarial Valuation: | December 31, 2011 | December 31, 2009 | December 31, 2007 |
| Effective: | July 2013 - June 2015 | July 2011 - June 2013 | July 2009 - June 2011 |
| Actuarial cost method: | Projected Unit Credit | Projected Unit Credit | Projected Unit Credit |
| Amortization method: | Level percentage of payroll | Level percentage of payroll | Level percentage of payroll |
| Asset valuation method: | Market value | Market value | Market value |
| Remaining amortization periods: | $\mathrm{N} / \mathrm{A}$ | $\mathrm{N} / \mathrm{A}$ | 20 years |
| Actuarial assumptions: | 2.75 percent | 2.75 percent | 2.75 percent |
| Inflation rate | 3.75 percent | 8.00 percent | 3.75 percent |
| Projected salary increases | 8.00 percent | 3.75 percent |  |
| Investment rate of return |  | 8.00 percent |  |


| 2010 |  | 2009 |  | 2008 |  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 377,778 | \$ | 592,546 | \$ | 552,242 | \$ | 540,796 | \$ | 547,829 |
|  | 377,778 |  | 592,546 |  | 552,242 |  | 540,796 |  | 547,829 |
| \$ | - | \$ |  | \$ | - | \$ | - | \$ |  |
| \$ | 8,451,349 | \$ | 8,281,261 | \$ | 7,733,970 | \$ | 7,325,161 | \$ | 7,061,608 |
|  | 4.47\% |  | 7.16\% |  | 7.14\% |  | 7.38\% |  | 7.76\% |


| December 31, 2005 | December 31, 2003 |
| :---: | :---: |
| July 2007 - June 2009 | July 2005 - June 2007 |
| Projected Unit Credit | Entry Age |
| Level percentage of payroll | Level percentage of payroll |
| Market value | Smoothing of Market value |
| 22 years | 22 years |
|  |  |
| 2.75 percent | 4.00 percent |
| 3.75 percent | 3.00 percent |
| 8.00 percent | 8.00 percent |

## Oregon Public Employees Retirement System

## Required Supplementary Information

Schedules of Funding Progress-OPEB Plans (Unaudited) (dollar amounts in millions) ${ }^{1}$

| Actuarial Valuation Date |  | Actuarial Value of Assets (a) |  | tuarial crued ity (AAL) <br> (b) |  | funded <br> rfunded) <br> (UAAL) <br> (b-a) | Funded Ratio (a/b) | Covered Payroll (c) |  | UAAL as a \% of Covered Payroll ((b-a)/c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Postemployment Healthcare Benefits - Retirement Health Insurance Account |  |  |  |  |  |  |  |  |  |  |
| 12/31/2005 | \$ | 181.0 | \$ | 495.9 | \$ | 314.9 | 36.5\% | \$ | 6,791.9 | 4.6\% |
| 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 |
| Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account |  |  |  |  |  |  |  |  |  |  |
| 12/31/2005 | \$ | 6.1 | \$ | 27.0 | \$ | 20.9 | 22.7\% | \$ | 1,827.0 | 1.1\% |
| 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 |

${ }^{1}$ Discrepancies contained in this table are the result of rounding differences.

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

 employers.

## Oregon Public Employees Retirement System

## Required Supplementary Information <br> Schedule of Claims Development Information (Unaudited) <br> Standard Retiree Health Insurance Account <br> Fiscal and Policy Year Ended June 30 (in millions)

|  |  | $\underline{2011}$ |  | $\underline{2012}$ |  | $\underline{2013}$ |  | 2014 |  | $\underline{2015}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Net earned required contributions and investment revenues | \$ | 174.19 | \$ | 188.99 | \$ | 195.59 | \$ | 198.85 |  | \$ 226.61 |
| 2. Unallocated expenses |  | 20.01 |  | 22.15 |  | 25.00 |  | 29.00 |  | 32.09 |
| 3. Estimated incurred claims and expense, end of policy year |  | 152.55 |  | 150.62 |  | 172.89 |  | 175.41 |  | 212.21 |
| 4. Paid (cumulative) as of: |  |  |  |  |  |  |  |  |  |  |
| End of policy year |  | 150.42 |  | 160.15 |  | 172.76 |  | 175.01 |  | 211.90 |
| One year later |  | 161.43 |  | 171.80 |  | 185.22 |  | 192.78 |  |  |
| Two years later |  | 161.34 |  | 171.68 |  | 185.21 |  |  |  |  |
| Three years later |  | 161.27 |  | 171.66 |  |  |  |  |  |  |
| Four years later |  | 161.25 |  |  |  |  |  |  |  |  |
| Five years later |  |  |  |  |  |  |  |  |  |  |
| 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 |
| One year later |  | 163.56 |  | 162.27 |  | 185.35 |  | 193.18 |  |  |
| Two years later |  | 163.47 |  | 162.20 |  | 185.34 |  |  |  |  |
| Three years later |  | 163.35 |  | 162.17 |  |  |  |  |  |  |
| Four years later |  | 164.34 |  |  |  |  |  |  |  |  |
| Five years later |  |  |  |  |  |  |  |  |  |  |
| 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 |  | 10.92 |  | 11.65 |  | 12.46 |  | 17.77 |  |  |

## Other Supplementary Information

Schedule of Plan Net Position
Defined Benefit Pension Plan
As of June 30, 2015
$\left.\begin{array}{lrrrrr} \\ & & \begin{array}{c}\text { Oregon Public } \\ \text { Service }\end{array} \\ \text { Retirement Plan } \\ \text { Pension } \\ \text { Program }\end{array}\right)$

## Oregon Public Employees Retirement System

Other Supplementary Information
Schedule of Changes in Plan Net Position
Defined Benefit Pension Plan
For the Year Ended June 30, 2015
$\left.\begin{array}{lllllll} & \begin{array}{c}\text { Oregon Public } \\ \text { Service Retirement } \\ \text { Plan }\end{array} & \\ \text { Pension } \\ \text { Program }\end{array}\right)$

## Other Supplementary Information <br> Schedule of Administrative Expenses - All Funds <br> For the Year Ended June 30, 2015

Personal Services:

| Staff Salaries | $\$ 19,679,589$ |
| :--- | ---: |
| Social Security | $1,475,691$ |
| Retirement | $4,136,470$ |
| Unemployment Compensation | 21,978 |
| Worker Compensation | 10,819 |
| Insurance | $5,239,832$ |
| Assessments | 124,371 |
| Total Personal Services |  |


| Professional Services: | 606,647 |
| :--- | ---: |
| Actuarial | 51,780 |
| Data Processing | 406,656 |
| Audit | 626,486 |
| Legal Counsel | 128,652 |
| Medical Consultants | 256,335 |
| Training and Recruitment | $4,810,531$ |
| Contract Services | $32,630,703$ |
| Healthcare Fees | $39,517,790$ |


| Communications: | 211,514 |
| :--- | ---: |
| Printing | 266,842 |
| Telephone | 554,936 |
| Postage | 139,844 |
| Travel | $1,173,136$ |

Rentals:

| Office Space | 255,160 |
| :--- | ---: |
| Equipment | 5,825 |
|  | 260,985 |

Miscellaneous:

| Central Government Charges | 959,815 |
| :--- | ---: |
| Supplies | $1,638,095$ |
| Maintenance | 716,111 |
| Non-Capitalized Equipment | 267,864 |
| Depreciation | $2,599,023$ |
| Bond Amortization | 36,833 |
| GASB 68 | 24,515 |
| $\quad$ Total Miscellaneous | $6,242,256$ |
| tal Administrative Expenses | $\$ 77,882,917$ |

## Other Supplementary Information <br> Schedule of Payments to Consultants and Contractors <br> For the Year Ended June 30, 2015

| Individual or Firm | Fees | Nature of Service |
| :--- | ---: | :--- |
| Milliman, Inc. | $\$ 606,647$ | Actuarial |
| Macias Gini \& O'Connell LLP | 401,471 | Audit |
| Oregon Audits Division | 5,185 | Audit |
| CEM Benchmarking Inc. | 45,000 | Benchmarking |
| BenefitHelp Solutions | $3,302,832$ | Health Insurance |
| Butler Partners \& Associates LLC | 79,920 | Health Insurance |
| Moda Health | $29,323,608$ | Health Insurance |
| Voya | $2,518,135$ | IAP Adminstration |
| Department of Justice | 615,225 | Legal |
| Ice Miller LLP | 11,261 | Legal |
| Cascade Centers Inc | 4,472 | Medical |
| Columbia Pain Management PC | 1,500 | Medical |
| Frederick William Miller, MD | 42,050 | Medical |
| Ronald N. Turco, MD | 4,000 | Medical |
| Mass Ingenuity | 4,400 | Strategic and Organizational Planning |
| HP Enterprise Services | 9,331 | Technology |
| LexisNexis Risk Data Management Inc | 4,428 | Technology |
| MMC Systems Inc. | $2,311,753$ | Technology |
| Oregon Department of Administrative Services | 31,900 | Technology |
| SHI International Corp | 85,878 | Technology |

## Oregon Public Employees Retirement System

## Other Supplementary Information

## Summary of Investment Fees, Commissions, and Expenses

For the Year Ended June 30, 2015

| Debt Securities Managers | 2015 |  |
| :---: | :---: | :---: |
|  |  |  |
| AllianceBernstein L.P. | \$ | 2,815,910 |
| BlackRock Asset Management |  | 2,829,419 |
| KKR Financial Credit Portfolio |  | 14,025,028 |
| Oak Hill Advisors |  | 8,580,045 |
| Wellington Management Company, LLP |  | 2,118,173 |
| Western Asset Management Company |  | 2,014,823 |
| Domestic Equity Fund Managers |  |  |
| AQR Capital Management |  | 1,242,221 |
| Aronson+Johnson+Ortiz, LP |  | 2,238,697 |
| The Boston Company Asset Management, LLC |  | 1,889,764 |
| Dimensional Fund Advisors |  | 2,363,847 |
| Hamilton Lane |  | 4,061,835 |
| Jackson Square Partners, LLC |  | 3,181,018 |
| Next Century Growth Investors |  | 1,530,398 |
| PIMCO |  | 1,723,038 |
| Wanger Asset Management, LP |  | 2,597,317 |
| Wellington Management Company, LLP |  | 2,289,934 |
| Other Domestic Equity Fund Managers |  | 4,396,394 |
| International Equity Fund Managers |  |  |
| Acadian Asset Management, Inc. |  | 3,021,364 |
| AllianceBernstein International |  | 3,736,983 |
| AQR Capital Management |  | 4,159,541 |
| Arrowstreet Capital, LP |  | 6,831,569 |
| Brandes Investment Partners LLC |  | 3,359,306 |
| Dimensional Fund Advisors |  | 3,778,037 |
| Genesis Investment Management, Ltd. |  | 3,822,084 |
| Harris Associates |  | 2,526,636 |
| Lazard Asset Management |  | 3,194,408 |
| Pyramis Global Investors |  | 6,804,067 |
| TT International Co., Ltd. |  | 2,116,132 |
| Victory Capital Management |  | 1,791,246 |
| Walter Scott \& Partners Limited |  | 2,614,414 |
| Wells Capital Management |  | 1,824,323 |
| Westwood Global Investments |  | 1,067,656 |
| William Blair \& Company, LLC |  | 2,585,907 |
| Other International Equity Fund Managers |  | 2,272,644 |
| Private Equity Managers |  |  |
| Apax Partners |  | 3,104,048 |
| Apollo Investment Corporation |  | 6,860,970 |
| Aquiline Capital Partners LLC |  | 3,475,313 |
| Black Diamond Capital Management, L.L.C. |  | 7,218,960 |
| The Blackstone Group L.P. |  | 3,956,258 |
| Centerbridge Partners, L.P. |  | 2,740,048 |
| CVC Capital Partners |  | 3,825,780 |
| First Reserve Corporation |  | 4,024,292 |
| Fisher Lynch Capital |  | 5,058,880 |
| Francisco Partners |  | 2,910,214 |
| GGV Capital |  | 3,000,000 |
| Kohlberg Kravis Roberts \& Co. L.P. |  | 20,647,250 |
| Lion Capital L.L.P. |  | 2,711,687 |
| Oak Hill Capital Partners |  | 4,414,728 |
| Oaktree Capital Management L.P. |  | 4,230,461 |
| Pathway Capital Management, L.P. |  | 3,093,917 |
| Providence Equity Partners L.L.C. |  | 4,516,760 |
| Riverside Company |  | 3,592,756 |
| TPG |  | 9,572,087 |
| Vista Equity Partners |  | 6,732,816 |
| Other Private Equity Fees |  | 91,384,690 |
| Alternative Equity Managers |  | 32,651,626 |
| Opportunity Portfolio Managers |  | 12,282,104 |
| Real Estate Managers |  | 70,650,775 |
| Brokerage Commissions |  | 21,076,735 |
| Consultant Fees |  | 5,485,250 |
| Custodian |  | 32,483 |
| State Street Bank: |  |  |
| Commission Expense - Option Future |  | 134,714 |
| Foreign Income Taxes |  | 14,372,326 |
| Operating Expenses ${ }^{1}$ |  | 42,959,538 |
| Other Expenses ${ }^{2}$ |  | 21,375,186 |
| State Treasury Fees |  | 10,064,748 |
| Deferred Compensation Investment Fees and Expenses |  | 2,979,804 |
| Other Investment Fees and Expenses |  | 981,885 |

Total Investment Fees, Commissions, and Expenses
\$ 547,523,267
${ }^{1}$ Start up fee for new private equity fund, legal fees, and real estate property
${ }^{2}$ Expenses related to real estate, private equity fees, capital gains tax, PWC service fees, incentive fees, travel, and legal fees.

## Investment Section

John D. SkJervem Chief Investment Officer Investment Division

# State Of Oregon <br> Office of the State Treasurer 

350 Winter Street NE, Suite 100
Salem, Oregon 97301-3896
November 19, 2015

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 $\$ 89.6$ billion as of June 30, 2015. This portfolio includes the Oregon Public Employee Retirement Fund (OPERF), the assets of which totaled $\$ 70.8$ billion at June 30, 2015 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-, 5and 10 -year periods ended June 30,2015 were $11.1 \%, 11.2 \%$ and $7.3 \%$, respectively ${ }^{1}$. According to state actuaries, this consistently positive investment performance has 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

[^1]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 solid returns last fiscal year (FY 2015), advancing $7.3 \%$ over the 12 -month period ended June 30 , 2015. With a net return of $6.8 \%$, OPERF's U.S. public equity portfolio lagged its benchmark in FY 2015 due to an emphasis on small capitalization stocks, a proxy for which (namely, the Russell 2000 index) registered a $6.5 \%$ return. However, all domestic stocks compared favorably to foreign equities as most international and emerging market indices recorded negative results in FY 2015. OPERF managers investing abroad produced a collective $3.1 \%$ loss last fiscal year, disappointing but materially better than the $5.0 \%$ 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 $\$ 14.4$ billion, OPERF's private equity investments represented $20.5 \%$ of total OPERF assets at June 30, 2015, and generated a net return of $9.5 \%$ in FY 2015. This FY 2015 result fell far short of the private equity portfolio's $15.7 \%$ benchmark return, but average annual returns over the previous 10 -year period remain favorable at $11.9 \%$ vs. $12.0 \%$ 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 2015, OPERF's real estate investments generated a $12.0 \%$ net return, slightly behind the $12.7 \%$ return on OPERF's real estate benchmark, the NCREIF index, lagged one quarter. At fiscal year-end, these real estate investments were valued at $\$ 7.5$ billion, and represented $10.5 \%$ of total OPERF assets. For the ten-year period ended June 30, 2015, OPERF's real estate portfolio delivered an $8.0 \%$ net average annual return, close to the benchmark's 8.4\% average annual return during that same period.

Bond markets delivered modest but volatile results in FY 2015, first rallying in response to an economic slowdown overseas, but then selling off sharply in anticipation of a shift in U.S. Federal Reserve policy. Investments in fixed income securities comprised 21.1\% of total OPERF assets at June 30, 2015, and contributed a meager $1.5 \%$ net return in FY 2015, slightly better than the $1.4 \%$ return recorded by OPERF's custom fixed income benchmark.

Finally, OPERF investments in "alternative" assets and "opportunistic" strategies contributed mixed results in FY 2015, 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 hedge funds. At June 30, 2015, these alternative asset and opportunistic strategies comprised only $3.8 \%$ of OPERF's total portfolio, but the Investment Division plans to significantly expand these strategies' combined OPERF allocation given their attractive return and diversification attributes.

John D) Skjervem
Chief Investment Officer

## Oregon Public Employees Retirement System <br> Investment Objectives

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

## Description of Investment Policies

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

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

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

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

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

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

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

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

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

## Investment Results*

Calculations were prepared using a time-weighted rate of return based on the market rate.
1 Prior to September 30, 2013, policy benchmark is $46 \%$ Morgan Stanley Capital International All Country World Index (MSCI ACWI) Net, 27\% Custom Fixed Income Benchmark, $16 \%$ Russell $3000+300 \mathrm{bps}$, and $11 \%$ National Council of Real Estate Investment Fiduciaries NCREIF) Property Index.
2 Prior to February 28, 2011, $90 \%$ Barclays Capital U.S. Universal Index and 10\% Solomon Smith Barney Inc. Non-US World Government Bond Hedged through February 28, 2011.
From March 1, 2011, to December 31, 2013, 60\% Barclays Capital U.S. Universal Index, 20\% S\&P/LSTA Leveraged Loan Index, 10\% JMP Emerging Market Bond Index Global (EMBI Global) Index, and 10\% Bank of America Merrill Lynch High Yield Master II Index.
From January 1, 2014, to current, 40\% Barclays Capital U.S. Aggregate Bond, 40\% Barclays Capital U.S. 1-3 Government Credit Bond Index, 15\% S\&P LSTA Leveraged Loan Index, and 5\% Bank of America Merrill Lynch High Yield Master II Index.
3 Returns are lagged one quarter.
4 Beginning in September 2010, the return combines the estimated return from the most recent quarter with a revision component that trues up the past two quarters' reported returns with the past two quarters' actual returns.
5 The inception date is July 1, 2011.

[^2] individual holdings.

## Oregon Public Employees Retirement System

OIC Target and Actual Investment Allocations as of June 30, 2015*

| Asset Class/Strategy | OIC Policy Range | Current Year Target | Asset Class/ Strategy | Actual Allocation |
| :---: | :---: | :---: | :---: | :---: |
| Cash | 0.0-3.0\% | 0.0\% | Cash | 4.3\% |
| Debt Securities | 15.0-25.0 | 20.0 | Debt Securities | 21.1 |
| Public Equity | 32.5-42.5 | 37.5 | Public Equity | 40.7 |
| Real Estate | 9.5-15.5 | 12.5 | Real Estate | 10.4 |
| Private Equity | 16.0-24.0 | 20.0 | Private Equity | 20.1 |
| Alternative Equity | 0.0-10.0 | 10.0 | Alternative Equity | 2.0 |
| Opportunity Portfolio ${ }^{1}$ | 0.0-3.0 | 0.0 | Opportunity Portfolio | 1.4 |
| 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.


[^3]
## List of Largest Assets Held

## Largest Stock Holdings (by Fair Value) <br> June 30, 2015

| Description | Shares | Fair Value |  |
| :--- | :---: | :---: | :---: |
| Exxon Mobil Corporation | $2,711,739$ | $\$$ | $225,616,685$ |
| Apple Inc. | $1,592,492$ |  | $199,738,309$ |
| Microsoft Corp. | $3,722,041$ | $164,328,110$ |  |
| Johnson \& Johnson | $1,303,485$ | $127,037,648$ |  |
| Pfizer Inc. | $3,778,546$ | $126,694,647$ |  |
| AT\&T Inc. | $3,192,963$ | $113,414,046$ |  |
| JPMorgan Chase \& Co. | $1,634,448$ | $110,750,196$ |  |
| Novartis International AG | $1,096,501$ | $108,118,953$ |  |
| Intel Corp. | $3,067,466$ | $93,296,978$ |  |
| Roche Holding AG-Genusschein | 322,445 | $90,397,079$ |  |

## Largest Bond Holdings (by Fair Value)

June 30, 2015

| Description |  | Par Value |  | Fair Value |
| :---: | :---: | :---: | :---: | :---: |
| FNMA TBA 30 Year Single Family Conventional 3.5\% Issue July 2015 | \$ | 192,675,000 | \$ | 198,560,624 |
| US Treasury Note $0.625 \%$ Due December 15, 2016 |  | 155,470,000 |  | 155,785,760 |
| Freddie Mac Note $0.875 \%$ Due March 7, 2018 |  | 122,810,000 |  | 122,379,599 |
| US Treasury Note $0.5 \%$ Due April 30, 2017 |  | 111,614,000 |  | 111,430,841 |
| US Treasury Note $0.375 \%$ Due October 31, 2016 |  | 99,092,000 |  | 99,030,068 |
| Fannie Mae Note 0.75\% Due April 20, 2017 |  | 85,000,000 |  | 84,854,556 |
| US Treasury Note $0.5 \%$ Due November 30, 2016 |  | 84,552,800 |  | 84,605,646 |
| US Treasury Note 3\% Due May 15, 2045 |  | 84,394,000 |  | 82,706,120 |
| US Treasury Note 2.125\% Due June 30, 2022 |  | 75,995,000 |  | 76,315,623 |
| FNMA TBA 30 Year Single Family Conventional 4\% Issue August 2015 |  | 66,250,000 |  | 70,190,577 |

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, 2015

|  | Assets Under <br> Management |  | Fees | Percentage |
| :--- | ---: | ---: | ---: | :---: |
| Investment Managers' Fees: | $\$ 15,709,553,788$ | $\$$ | $32,383,398$ | $0.21 \%$ |
| Debt Securities Managers | $30,273,207,903$ | $83,411,330$ | 0.28 |  |
| Public Equity Managers | $7,759,820,864$ | $70,650,775$ | 0.91 |  |
| Real Estate Managers | $14,956,767,833$ | $197,071,915$ | 1.32 |  |
| Private Equity Managers | $1,498,022,765$ | $32,651,626$ | 2.18 |  |
| Alternative Equity Managers | $1,073,948,950$ | $12,282,104$ | 1.14 |  |
| Opportunity Portfolio Managers | $\mathbf{\$ 7 1 , 2 7 1 , 3 2 2 , 1 0 3}$ |  |  |  |
| Total Assets Under Management |  |  |  |  |

Other Investment Service Fees:
Investment Consultants
Commissions and Other Fees
Total Investment Service and Managers' Fees

| $5,485,250$ |  |
| ---: | ---: |
|  | $113,586,869$ |
| $\$ \mathbf{5 4 7 , 5 2 3 , 2 6 7}$ |  |

Schedule of Broker Commissions
For the Fiscal Year Ended June 30, 2015

| Broker's Name | Commission | Shares / Par | Commission <br> Per Share |
| :--- | ---: | ---: | :---: |
| Goldman, Sachs \& Co. | $\$$ | $1,668,780$ | $\$ 151,980,806$ |
| $\$$ S.P. Morgan Securities Inc. | $1,380,400$ | $778,772,293$ | 0.0110 |
| UBS Securities Inc. | $1,365,656$ | $250,762,103$ | 0.0018 |
| INSTINET | $1,352,788$ | $765,595,561$ | 0.0054 |
| MORGAN STANLEY | $1,006,848$ | $196,240,437$ | 0.0018 |
| Barclays Capital, Inc. | 966,673 | $50,008,035$ | 0.0051 |
| Investment Technology Group Inc. | 913,211 | $160,917,341$ | 0.0193 |
| Citigroup Global Markets Inc | 871,228 | $157,982,605$ | 0.0057 |
| Credit Suisse First Boston | 856,167 | $135,004,192$ | 0.0055 |
| Merrill Lynch \& Co., Incorporated | 842,264 | $161,753,186$ | 0.0063 |
| Deutsche Bank | 801,350 | $165,472,282$ | 0.0052 |
| Merrill Lynch, Pierce, Fenner \& Smith Inc. | 555,417 | $74,342,890$ | 0.0048 |
| HSBC | 521,826 | $204,397,024$ | 0.0075 |
| Societe Generale | 475,210 | $170,835,648$ | 0.0026 |
| Jefferies \& Company, Inc. | 357,572 | $04,292,973$ | 0.0028 |
| Macquarie Securities | 354,688 | $85,479,748$ | 0.0056 |
| Royal Bank of Canada | 288,618 | $12,368,862$ | 0.0233 |
| Sanford C. Bernsterin LTD | 279,938 | $123,589,413$ | 0.0023 |
| Liquidnet, Inc. | 255,745 | $20,843,569$ | 0.0123 |
| Russell Investments | 228,267 | $6,958,106$ | 0.0328 |

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 at June 30, 2015 | Percent of Total Fair Value* |
| :---: | :---: | :---: |
| Debt Securities |  |  |
| U.S. Government Securities | \$ 1,787,790,750 | 2.51\% |
| U.S. Agency Securities | 2,101,939,972 | 2.95 |
| Corporate Bonds | 6,084,047,708 | 8.55 |
| Asset-Backed Securities | 2,405,141,850 | 3.37 |
| International Debt Securities | 2,284,452,419 | 3.21 |
| Non-US Government Debt Securities | 209,701,468 | 0.29 |
| Municipal Bonds | 95,670,114 | 0.13 |
| Mutual Funds - Domestic Fixed Income | 673,213,510 | 0.94 |
| Mutual Funds - International Fixed Income | 67,595,997 | 0.09 |
| Total Debt Securities | 15,709,553,788 | 22.04 |
| Public Equity |  |  |
| Domestic Equity Securities | 11,006,880,948 | 15.44 |
| International Equity Securities | 10,142,515,721 | 14.23 |
| Mutual Funds - Domestic Equity | 4,436,392,684 | 6.22 |
| Mutual Funds - Global Equity | 730,770,079 | 1.03 |
| Mutual Funds - International Equity | 3,515,390,105 | 4.93 |
| Mutual Funds - Target Date | 441,258,366 | 0.62 |
| Total Public Equity | 30,273,207,903 | 42.47 |
| Real Estate | 7,759,820,864 | 10.89 |
| Private Equity | 14,956,767,833 | 20.99 |
| Alternative Equity | 1,498,022,765 | 2.10 |
| Opportunity Portfolio | 1,073,948,950 | 1.51 |
| Total Fair Value | \$ 71,271,322,103 | 100.00\% |

*These percentages do not include cash and cash equivalents.

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Actuarial Section

## Re: Actuarial Valuation as of December 31, 2014

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, 2014. Our findings are set forth in the system-wide December 31, 2014 Actuarial Valuation, issued November 12, 2015. Previously, we published a system-wide December 31, 2013 Actuarial Valuation, which was issued September 29, 2014. The December 31, 2014 Actuarial Valuation reflects the effects of the Oregon Supreme Court decision in Moro v. State of Oregon. Due to its publication date, the December 31, 2013 Actuarial Valuation did not reflect the Moro decision. However, for preparation of current year financial reporting, the results of that valuation have subsequently been adjusted as described below to reflect Moro's effect on plan COLA provisions.

Both the December 31, 2014 Actuarial Valuation and the December 31, 2013 Actuarial Valuation are used to develop information provided in the Comprehensive Annual Financial Report (CAFR) for Oregon PERS. The December 31, 2014 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, 2013 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, 2014 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.

[^4]Public Employees Retirement Board
Oregon Public Employees Retirement System
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The PERB has sole authority to determine the actuarial assumptions and methods used for the valuation. The actuarial assumptions and methods used in the December 31, 2014 Actuarial Valuation were adopted by the PERB based upon the results of the 2014 Experience Study conducted by Milliman, issued September 23, 2015. The actuarial assumptions and methods used in the December 31, 2013 Actuarial Valuation were adopted by the PERB based upon the results of the 2012 Experience Study conducted by Milliman, issued September 18, 2013. The assumptions and methods used in each valuation 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 2015 Comprehensive Annual Financial Report (CAFR) based on the December 31, 2014 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, 2014 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, 2015 fiscal year end was determined based on the results of the December 31, 2013 Actuarial Valuation, updated to reflect the change in COLA provisions subsequent to that valuation's publication due to the Moro decision. 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.

[^5]Public Employees Retirement Board
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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

These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our GASB 67 Reporting for Fiscal Year End 2015 letter dated November 25, 2015.

## 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, 2013 Actuarial Valuation were adopted by the PERB and established employer contributions for the July 1, 2015 to June 30, 2017 biennium. Contribution rates includes 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, 2014, there are also 133 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

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trust and are used to offset a portion of future contribution requirements of the depositing employers via side account transfers. For financial reporting purposes, lump sum deposits are not considered as contributions in relation to the actuarially determined contribution. However, side accounts are included as assets in the Fiduciary Net Position. The Schedule of Funding Progress and Solvency Test also include side accounts as part of the Plan's assets.

## Actuarial Basis

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

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

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

Future actuarial measurements may differ significantly from the current measurements presented in these reports due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the System's funded status); and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The PERB has the final decision regarding the appropriateness of the assumptions and adopted them as indicated herein at its September 2013 and September 2015 public meetings.

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

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## Oregon Public Employees Retirement System

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calculations in the reports have been made on a basis consistent with our understanding of the System's funding requirements and goals. The calculations have been made on a basis consistent with our understanding of the System benefit provisions as summarized in the reports, and of 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 this report. Accordingly, additional determinations may be needed for other purposes.

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

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

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

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

Sincerely,

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


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

## Actuarial Assumptions and Methods

## Tier One/Tier Two (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 One/Tier Two benefits.

Tier One/Tier Two UAL amortization

Retiree Healthcare UAL amortization

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 their date of entry until their assumed date of exit, taking into consideration expected future compensation increases. Thus, the total pension to which each member is expected to become entitled at retirement is broken down into units, each associated with a year of past or projected future credited service. Typically, when this method is introduced, there will be an initial liability for benefits credited for service prior to that date, and to the extent that the liability is not covered by assets of the plan, there is an unfunded accrued liability to be funded over a stipulated period in accordance with an amortization schedule.
A detailed description of the calculation follows:

- An individual member's entry age present value of projected benefits is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the member's entry age using the projected compensation and service at each separation date.
- An individual member's entry age present value of projected salaries is the sum of the present value of the actual or projected compensation over the member's working career associated with each possible future separation date, determined at the member's entry age.
- An individual member's present value of projected benefits is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the valuation date using the projected compensation and service at each separation date.
- An individual member's normal cost for a certain year is the member's entry age present value of projected benefits divided by the member's entry age present value of projected salaries and multiplied by the member's projected compensation for the year following the valuation date.
- An individual member's actuarial accrued liability is the member's present value of projected benefits less the sum of the present value of the member's normal costs for each future year, determined at the valuation date using the projected compensation and service at each future year.
-The plan's normal cost is the sum of the individual member normal costs, and the plan's actuarial accrued liability is the sum of the individual member accrued liabilities.
The Tier One/Tier Two UAL amortization period will be reset at 20 years as of December 31, 2013. Gains and losses between subsequent odd-year valuations will be amortized as a level percentage of combined valuation payroll (Tier One/Tier Two plus OPSRP payroll) over a closed 20 year period from the valuation in which they are first recognized.

The UAL for Retiree Health Care as of December 31, 2007 is amortized as a level percentage of combined valuation 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 (Tier One/Tier Two plus OPSRP payroll) over a closed 10 year period from the valuation in which they are first recognized.

## Oregon Public Employees Retirement System

Asset valuation method The actuarial value of assets equals the market value of assets, excluding the Contingency and Capital Preservation Reserves, and the Rate Guarantee Reserve when it is in positive surplus status.
Market values are reported to Milliman by PERS. It is our understanding that select real estate and private equity investments are reported on a three-month lag basis. This valuation report does not attempt to quantify any effects of the reporting lag.

Contribution rate stabilization method

Allocation of Liability for Service Segments

Contribution rates for a rate pool (e.g. Tier One/Tier Two SLGRP, Tier One/ Tier Two School Districts, OPSRP) are confined to a collar 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 percentage points or 20 percent of the prior contribution rate. If the funded percentage excluding side accounts drops below 60 percent or increases above 140 percent, the size of the collar doubles. If the funded percentage excluding side accounts is between 60 percent and 70 percent or between 130 percent and 140 percent, the size of the rate collar is increased on a graded scale.
For active Tier One/Tier Two 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 percent ( 0 percent for police and fire) based on account balance with each employer and 75 percent ( 100 percent for police and fire) based on service with each employer.
The entire normal cost is allocated to the current employer.

| Allocation of Benefits- | The BIF reserve is allocated to each rate pool in proportion to the retiree liability <br> attributable to the rate pool. |
| :--- | :--- |

## Economic Assumptions

The Board adopted the following economic assumptions for the December 31, 2014 and 2015 actuarial valuations.

| Investment return | 7.50 percent compounded annually |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Pre-2014 Interest crediting | 8.00 percent compounded annually on members' regular account balances 8.25 percent compounded annually on members' variable account balances |  |  |  |
| Post-2013 Interest crediting | 7.50 percent compounded annually on members' regular account balances 7.50 percent compounded annually on members' variable account balances |  |  |  |
| Inflation | 2.50 percent compounded annually |  |  |  |
| Administrative expenses | \$33.0 million per year is added to the normal cost. |  |  |  |
| Payroll growth | 3.50 percent compounded annually. This assumption represents the sum of the inflation assumption and a real wage growth assumption of 100 basis points. |  |  |  |
| Healthcare cost inflation | 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 |
|  | 2015 | 7.0\% | 2041-2043 | 5.8\% |
|  | 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 |

## Demographic Assumptions

The Board adopted the following demographic assumptions for the December 31, 2014 and 2015 actuarial valuations. 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 <br> Disabled, No Collar, Sex Distinct |
| :--- | :---: |
| Male | 70 percent of Disabled table |
| Female | 95 percent of Disabled table |

## Oregon Public Employees Retirement System

## Non-Annuitant Members

The following mortality rates were first adopted for non-annuitant members for the December 31, 2014 actuarial valuation, except for the Other General Service male and School District female rates which were adopted in the December 31, 2010 valuation.

| Basic Table | Percent of Healthy Retired Mortality Tables |
| :--- | :---: |
| School District male | $60 \%$ |
| Other General Service male | 75 |
| Police and 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.

The following retirement rate assumptions were first adopted in the December 31, 2014 valuation.

| Age | Police and Fire |  |  | General Service/School Districts |  |  |  |  |  | Judges |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <13 Years | 13-24 Years | 25+ Years | General Service |  |  | School Districts |  |  |  |
|  |  |  |  | < 15 Years | $\begin{aligned} & 15-29 \\ & \text { Years } \end{aligned}$ | 30+ Years | < 15 Years | 15-29 Years | 30+ Years |  |
| <50 |  |  |  |  |  | 15.0\% |  |  | 15.0\% |  |
| 50 | 1.5\% | 2.0\% | 24.0\% |  |  | 15.0 |  |  | 15.0 |  |
| 51 | 1.5 | 2.0 | 17.5 |  |  | 15.0 |  |  | 15.0 |  |
| 52 | 1.5 | 2.0 | 17.5 |  |  | 15.0 |  |  | 25.0 |  |
| 53 | 1.5 | 2.0 | 17.5 |  |  | 17.5 |  |  | 25.0 |  |
| 54 | 1.5 | 2.0 | 17.5 |  |  | 17.5 |  |  | 25.0 |  |
| 55 | 5.0 | 8.0 | 23.5 | 1.5\% | 3.0\% | 17.5 | 1.5\% | 4.5\% | 25.0 |  |
| 56 | 5.0 | 8.0 | 23.5 | 1.5 | 3.0 | 17.5 | 1.5 | 4.5 | 25.0 |  |
| 57 | 5.0 | 8.0 | 23.5 | 1.5 | 3.0 | 20.0 | 1.5 | 4.5 | 25.0 |  |
| 58 | 5.0 | 8.0 | 23.5 | 1.5 | 10.0 | 20.0 | 2.5 | 14.5 | 32.0 |  |
| 59 | 5.0 | 8.0 | 23.5 | 3.5 | 10.0 | 20.0 | 4.5 | 14.5 | 28.5 |  |
| 60 | 5.0 | 11.0 | 23.5 | 6.0 | 10.0 | 20.0 | 6.5 | 14.5 | 28.5 | 10.0\% |
| 61 | 5.0 | 14.0 | 23.5 | 6.0 | 10.0 | 24.0 | 8.0 | 14.5 | 28.5 | 10.0 |
| 62 | 15.0 | 25.0 | 38.0 | 12.5 | 19.5 | 31.0 | 15.0 | 25.0 | 34.0 | 10.0 |
| 63 | 7.0 | 17.0 | 38.0 | 12.5 | 16.5 | 22.0 | 13.0 | 22.0 | 26.5 | 10.0 |
| 64 | 7.0 | 17.0 | 17.0 | 12.5 | 16.5 | 26.0 | 13.0 | 19.5 | 31.5 | 10.0 |
| 65 | 100.0 | 100.0 | 100.0 | 19.5 | 28.0 | 32.0 | 25.5 | 33.5 | 38.0 | 10.0 |
| 66 |  |  |  | 25.5 | 35.0 | 38.0 | 21.5 | 36.5 | 38.0 | 10.0 |
| 67 |  |  |  | 22.5 | 25.0 | 26.0 | 19.5 | 34.5 | 38.0 | 10.0 |
| 68 |  |  |  | 19.5 | 25.0 | 26.0 | 19.5 | 28.0 | 28.5 | 10.0 |
| 69 |  |  |  | 19.5 | 25.0 | 26.0 | 19.5 | 28.0 | 28.5 | 30.0 |
| 70 |  |  |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

## Retirement from Dormant Status

Dormant members are assumed to retire at Normal Retirement Age (age 58 for Tier One, age 60 for Tier Two, age 60 for judges, and age 55 for police and fire) or at the first unreduced retirement age ( 30 years of service, or age 50 with 25 years of service for police and 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.

| Partial Lump Sum: | $4.5 \%$ for all years |
| :--- | :---: |
| Total Lump Sum: | $3.0 \%$ for 2015, declining by $0.5 \%$ per year until reaching $0.0 \%$ |
| No Lump Sum: | $92.5 \%$ in 2014, increasing by $0.5 \%$ 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.

| 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.

## Disability Assumptions

There are two disability assumptions used in the valuation-duty disability and ordinary disability. Duty disability rates are separated between police and 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 and fire were first adopted effective December 31, 2012. The rates for ordinary disability were first adopted effective December 31, 2010.

| Type | Percentage of the 1985 <br> Disability Class 1 Rates |
| :--- | :---: |
| Duty Disability Police and 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 <br> Hire Date | School District <br> Male | School District <br> Female | General <br> Service Male | General <br> Service Female | Police and <br> 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 for the System, which was published in September 2015.

## Oregon Residency Post-Retirement

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

## Oregon Public Employees Retirement System

## 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 <br> Service | Police and <br> 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 percent.
For a complete table of rates, please refer to the 2014 Experience Study for the System, which was 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.

| Actives | Rates |
| :--- | :--- |
| 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 and Fire | 4.75 |
| Local Police and Fire | 7.50 |
| Dormants |  |
| Dormant members | $3.00 \%$ |

## 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.

|  | Rates |
| :--- | :--- |
| Tier One |  |
| State General Service | $1.60 \%$ |
| School District | 0.25 |
| Local General Service | 2.20 |
| State Police and Fire | 1.80 |
| Local Police and Fire | 2.90 |
| Tier Two | 0.00 |

## Retiree Healthcare Participation

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

| 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 | $38.0 \%$ |
| Healthy Retired | 20.0 |
| Disabled Retired |  |

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.

## Oregon Public Employees Retirement System

Actuarial Assumptions and Methods
OPSRP
Most of the methods and assumptions adopted for the OPSRP valuation are the same as those used for Tier One/ Tier Two. 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

## OPSRP UAL amortization

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

## Economic Assumptions

Administrative expenses: $\$ 5.5$ million per year is added to the normal cost.

## Demographic Assumptions

## Retirement Assumptions

Rates of Retirement from Active Status

| Police and Fire |  |  |  | General Service |  | School Districts |  | General Service (Including School Districts) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | $<13$ years | 13-24 years | 25+ years | $<15$ years | 15-29 years | $<15$ years | 15-29 years | $30+$ years |
| 50 | 1.0\% | 1.5\% | 5.5\% |  |  |  |  |  |
| 51 | 1.0 | 1.5 | 5.5 |  |  |  |  |  |
| 52 | 1.0 | 1.5 | 5.5 |  |  |  |  |  |
| 53 | 1.0 | 1.5 | 25.0 |  |  |  |  |  |
| 54 | 1.0 | 1.5 | 17.5 |  |  |  |  |  |
| 55 | 4.0 | 5.0 | 23.5 | 1.0\% | 2.5\% | 1.0\% | 2.5\% | 5.0\% |
| 56 | 4.0 | 5.0 | 23.5 | 1.0 | 2.5 | 1.0 | 2.5 | 5.0 |
| 57 | 4.0 | 5.0 | 23.5 | 1.0 | 2.5 | 1.0 | 2.5 | 7.5 |
| 58 | 4.0 | 5.0 | 23.5 | 1.0 | 3.0 | 1.0 | 3.0 | 30.0 |
| 59 | 4.0 | 5.0 | 23.5 | 1.5 | 3.0 | 1.5 | 3.0 | 25.0 |
| 60 | 4.0 | 15.0 | 23.5 | 3.0 | 3.75 | 3.0 | 3.75 | 20.0 |
| 61 | 4.0 | 8.5 | 23.5 | 3.0 | 5.0 | 3.0 | 5.0 | 20.0 |
| 62 | 12.0 | 25.0 | 38.0 | 8.0 | 12.0 | 6.0 | 12.0 | 30.0 |
| 63 | 7.0 | 17.0 | 38.0 | 7.0 | 10.0 | 6.0 | 10.0 | 20.0 |
| 64 | 7.0 | 17.0 | 17.0 | 6.0 | 10.0 | 6.0 | 10.0 | 20.0 |
| 65 | 100.0 | 100.0 | 100.0 | 13.0 | 35.0 | 12.0 | 35.0 | 20.0 |
| 66 |  |  |  | 15.5 | 33.0 | 14.0 | 33.0 | 20.0 |
| 67 |  |  |  | 15.5 | 22.0 | 11.0 | 22.0 | 30.0 |
| 68 |  |  |  | 13.0 | 17.0 | 9.0 | 17.0 | 20.0 |
| 69 |  |  |  | 13.0 | 17.0 | 9.0 | 17.0 | 20.0 |
| 70 |  |  |  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

## Rates of Retirement from Dormant Status

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

## Changes in Actuarial Methods and Assumptions - Tier One/Tier Two and OPSRP

A summary of key changes implemented since the December 31, 2012 valuation are described briefly below. Additional detail and a comprehensive list of changes in methods and assumptions can be found in the 2014 Experience Study for the System, published in September 2015.

## Changes in Actuarial Methods and Allocation Procedures

## Allocation of Liability for Service Segments

For purposes of allocating Tier One/Tier Two members' actuarial accrued liability among multiple employers, the valuation uses a weighted average of the Money Match methodology and the Full Formula methodology used by PERS when the member retires. The weights are determined based on the prevalence of each formula among the current Tier $1 /$ Tier 2 population. For the December 31, 2012 and December 31, 2013 valuations, the Money Match was weighted 30 percent for General Service members and 5 percent for Police \& Fire members. For the December 31, 2014 and December 31, 2015 valuations, this weighting has been adjusted to 25 percent for General Service members and 0 percent for Police \& Fire members, based on a projection of the proportion of liability attributable to Money Match benefits at those valuation dates.

## Changes in Economic Assumptions

## Investment Return and Interest Crediting

The assumed investment return and interest crediting to both regular and variable account balances was reduced to $7.50 \%$. Previously, the assumed investment return and interest crediting was 7.75\%.

## Inflation

The inflation assumption was reduced from $2.75 \%$ to $2.50 \%$.

## Payroll Growth

The assumed payroll growth rate was reduced from $3.75 \%$ to $3.50 \%$.

## Tier One/Tier Two Administrative Expenses

An explicit assumption for administrative expenses of $\$ 33.0$ million per year was added for Tier One/Tier Two.

## Healthcare Cost Inflation

The healthcare cost inflation for the maximum RHIPA subsidy was updated based on analysis performed by Milliman's healthcare actuaries. This analysis includes the consideration of the excise tax that will be introduced in 2018 by the Patient Protection and Affordable Care Act.

## Changes in Demographic Assumptions

## Healthy Mortality

The healthy mortality assumption is based on the RP2000 generational mortality tables with group-specific class and setback adjustments. The projection scale used to project improvements in life expectancy was updated from Scale AA to Scale BB to more closely align with recently released standard tables.

## Disabled Mortality

The disabled mortality was changed from the static RP2000 disabled tables to include a generational mortality projection using Scale BB.

## Disability, Retirement from Active Status, and Termination

Rates for disability, retirement from active status, and termination were adjusted.

## Retiree Healthcare Participation

The RHIA participation rate for healthy retirees was reduced from $45 \%$ to $38 \%$. The RHIPA participation rates were updated for members with more than 14 years of service.

## Changes in Salary Increase Assumptions

## Merit Increases, Unused Sick Leave, and Vacation Pay

Assumed merit increases were increased slightly for all members. Unused Sick Leave and Vacation Pay rates were adjusted.

## Oregon Public Employees Retirement System

## Actuarial Schedules

Schedule of Active Member Valuation Data

| Valuation <br> Date | Count | Annual <br> Payroll in <br> Thousands | Average <br> Annual <br> Pay | \% Increase in <br> Average Pay | Number of <br> Participating <br> Employers 1 |
| :---: | :---: | ---: | :---: | :---: | :---: |
| $12 / 31 / 2005^{2}$ | 156,501 | $\$ 6,791,891$ | $\$ 43,398$ | $(1.8) \%$ | 810 |
| $12 / 31 / 2006$ | 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 |

${ }^{1}$ 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 with the December 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) ${ }^{3}$

| Valuation Date | Added to Rolls |  | Removed from Rolls |  | Rolls - End of Year |  | \% Increase <br> in Annual <br> Allowances ${ }^{1}$ | Average <br> Annual <br> Allowances |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Annual Allowances | Count | Annual Allowances | Count | Annual Allowances |  |  |
| 12/31/2005 ${ }^{2}$ | 4,472 | \$ 149,127 | 3,217 | \$ 36,784 | 102,923 | \$ 2,267,198 | 5.2\% | \$ 22,028 |
| 12/31/2006 | 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 |

[^8]
## Schedules of Funding Progress by Rate Pool

(dollar amounts in millions)

| Actuarial <br> Valuation Date | Actuarial Value of Assets ${ }^{1,2}$ (a) | Actuarial <br> Accrued Liability (AAL) ${ }^{2}$ <br> (b) | $\begin{aligned} & \text { Unfunded AAL } \\ & (\text { UAAL) } \\ & \text { (b-a) } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Funded Ratio } \\ (\mathrm{a} / \mathrm{b}) \end{gathered}$ | Covered Payroll ${ }^{3}$ (c) | UAAL as a $\%$ of Covered Payroll ((b-a)/c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Tier One/Tier Two State and Local Government Rate Pool |  |  |  |  |  |  |
| 12/31/2009 ${ }^{4}$ | \$ 25,068.8 | \$ 29,029.1 | \$ 3,960.3 | 86.4\% | \$ 3,465.1 | 114.3\% |
| 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 |
| Tier One/Tier Two School District Rate Pool |  |  |  |  |  |  |
| 12/31/2009 | 19,388.0 | 22,517.6 | 3,129.6 | 86.1 | 2,079.2 | 150.5 |
| 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 |
| Tier One/Tier Two Independent Employers and Judiciary |  |  |  |  |  |  |
| 12/31/2009 ${ }^{4}$ | 3,926.7 | 4,665.9 | 739.3 | 84.2 | 579.1 | 127.7 |
| 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 | 4,967.4 | 6,104.9 | 1,137.4 | 81.4 | 479.2 | 237.4 |
| OPSRP Rate Pool |  |  |  |  |  |  |
| 12/31/2009 | 445.4 | 535.5 | 90.1 | 83.2 | 2,388.8 | 3.8 |
| 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 | 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 |
| Postemployment Healthcare Benefits - Retirement Health Insurance Account |  |  |  |  |  |  |
| 12/31/2009 | 214.1 | 511.2 | 297.1 | 41.9 | 6,123.4 | 4.9 |
| 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 | 5,314.7 | 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 |
| Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account |  |  |  |  |  |  |
| 12/31/2009 | 6.4 | 24.5 | 18.2 | 25.9 | 1,705.1 | 1.1 |
| 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 |

Notes:
${ }_{2}^{1}$ Side account assets are included with Tier One/Tier Two assets.
${ }^{2}$ Excludes effect of Multnomah Fire District (UAAL of $\$ 175$ million as of December 31, 2013).
${ }^{3}$ Covered payroll shown is payroll for members of the rate pool benefiting from the specified program. For example, Tier One/Tier Two School District payroll is only payroll for Tier One/Tier Two members and excludes OPSRP. However, UAAL is amortized using combined Tier One/Tier Two and OPSRP.
${ }_{5}^{4}$ Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January following the validation date.
${ }^{5}$ The December 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 or Oregon, which overturned portions of Senate Bills 822 and 861 .

## Oregon Public Employees Retirement System

Actuarial Schedules
Analysis of Financial Experience
Gains and Losses in Unfunded Accrued Liability Resulting from Differences between Assumed Experience and Actual Experience and Assumption Change

## Tier One/Tier Two Pension Program

(dollars in millions)
\$ Gain/(Loss) for Year

| Type of Activity |  | 2014 |  | 2013 |
| :---: | :---: | :---: | :---: | :---: |
| Retirements from Active Status | \$ | 18.3 | \$ | (93.8) |
| Active Mortality and Withdrawal |  | (40.9) |  | (34.2) |
| Pay Increases |  | (37.3) |  | 26.0 |
| Contributions |  | 59.8 |  | 54.1 |
| Interest Crediting Experience |  | 18.6 |  | (125.01) |
| Investment Income |  | (186.3) |  | 3,378.5 |
| Retirement, Mortality and Lump Sums from Dormant Status |  | 0.9 |  | 35.2 |
| Retiree and Beneficiary Mortality |  | (148.4) |  | (121.1) |
| New Entrants |  | (0.7) |  | (0.5) |
| Other |  | (34.7) |  | (35.9) |
| Gain/(Loss) During Year From Financial Experience | \$ | (350.8) | \$ | 3,083.3 |
| Non-Recurring Items |  |  |  |  |
| Assumption Changes |  | $(3,468.0)$ |  | - |
| Plan Changes |  | $(5,027.0)$ |  | - |
| Composite Gain/(Loss) During Year | \$ | $(8,845.8)$ | \$ | 3,083.3 |

## OPSRP Pension Program

(dollar amounts in millions)

|  | \$ Gain/(Loss) for Year |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Type of Activity |  | 2014 |  | 2013 |
| Retirements from Active Status | \$ | 3.8 | \$ | 2.1 |
| Active Mortality and Withdrawal |  | (11.8) |  | (5.5) |
| Pay Increases |  | (32.9) |  | (6.3) |
| Contributions |  | 22.3 |  | 8.8 |
| Investment Income |  | 2.6 |  | 122.3 |
| Retirement, Mortality and Lump Sums from Dormant Status |  | 2.4 |  | 0.6 |
| Retiree and Beneficiary Mortality |  | (0.4) |  | (0.6) |
| New Entrants |  | (74.5) |  | (53.6) |
| Other |  | 0.4 |  | (4.3) |
| Gain/(Loss) During Year From Financial Experience | \$ | (88.1) | \$ | 63.5 |
| Non-Recurring Items |  |  |  |  |
| Assumption Changes |  | (188.7) |  | - |
| Plan Changes |  | (70.7) |  | - |
| Composite Gain/(Loss) During Year | \$ | (347.5) | \$ | 63.5 |

## Retiree Healthcare Programs

(dollar amounts in millions)

|  | \$ Gain/(Loss) for Year |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | RHIA |  |  |  | RHIPA |  |  |  |
| Type of Activity | 2014 |  | 2013 |  | 2014 |  | 2013 |  |
| Contributions | \$ | 2.0 | \$ | (0.6) | \$ | 0.3 | \$ | 0.0 |
| Investment Income |  | (2.3) |  | 23.2 |  | (0.1) |  | 0.2 |
| Other |  | 7.7 |  | 7.2 |  | 3.5 |  | 0.8 |
| Gain/(Loss) During Year From Financial Experience | \$ | 7.4 | \$ | 29.9 | \$ | 3.7 | \$ | 1.1 |
| Non-Recurring Items |  |  |  |  |  |  |  |  |
| Assumption Changes |  | 5.4 |  | - |  | (11.5) |  | - |
| Composite Gain/(Loss) During Year | \$ | 2.8 | \$ | 29.9 | \$ | (7.8) | \$ | 1.1 |

## Oregon Public Employees Retirement System

Solvency Test
Tier One/Tier Two Pension (dollars amounts in millions)

| Actuarial Accrued Liability |  |  |  |  |  | Valuation Assets ${ }^{1,3}$ |  | Portion of Actuarial Accrued Liabilities Covered by Assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | Active <br> Member Contributions | Retired <br> Members and Beneficiaries |  | Other <br> Members |  |  |  |  |  |  |
|  | (1) |  | (2) |  | (3) |  |  | (1) | (2) | (3) |
| 12/31/2005 | \$ 9,169.7 | \$ | 26,201.9 | \$ | 13,868.6 | \$ | 51,327.5 | 100\% | 100\% | 115\% |
| 12/31/2006 | 9,410.8 |  | 27,302.8 |  | 14,424.4 |  | 56,465.0 | 100 | 100 | 137 |
| 12/31/2007 | 9,225.0 |  | 28,766.9 |  | 14,676.2 |  | 59,052.7 | 100 | 100 | 144 |
| 12/31/2008 | 8,341.5 |  | 30,141.3 |  | 15,439.9 |  | 43,250.1 | 100 | 100 | 31 |
| 12/31/2009 ${ }^{1}$ | 8,392.0 |  | 32,072.7 |  | 15,810.4 |  | 48,283.8 | 100 | 100 | 49 |
| 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 |

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

(dollars amounts in millions)

| Actuarial Accrued Liability |  |  |  | Valuation Assets | Portion of Actuarial Accrued Liabilities Covered by Assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | Active <br> Member Contributions | Retired Members and Beneficiaries | Other <br> Members |  |  |  |  |
|  | (1) | (2) | (3) |  | (1) | (2) | (3) |
| 12/31/2005 | \$ 0.0 | \$ 0.0 | \$ 53.8 | \$ 55.0 | 100\% | 100\% | 102\% |
| 12/31/2006 | 0.0 | 0.0 | 115.0 | 151.4 | 100 | 100 | 132 |
| 12/31/2007 | 0.0 | 0.0 | 203.0 | 275.1 | 100 | 100 | 135 |
| 12/31/2008 | 0.0 | 0.3 | 336.5 | 270.5 | 100 | 100 | 80 |
| 12/31/2009 | 0.0 | 1.5 | 534.0 | 445.4 | 100 | 100 | 83 |
| 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 |

[^9]
## Retiree Health Insurance Account (RHIA) <br> (dollar amounts in millions)

| Valuation Date | Actuarial Accrued Liability |  |  | Valuation Assets | Portion of Actuarial Accrued Liabilities Covered by Assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Active <br> Member Contributions | Retired <br> Members and Beneficiaries | Other <br> Members |  |  |  |  |
|  | (1) | (2) | (3) |  | (1) | (2) | (3) |
| 12/31/2005 | \$ 0.0 | \$ 390.1 | \$ 105.1 | \$ 181.0 | 0.0 \% | 46 \% | 0.0 \% |
| 12/31/2006 | 0.0 | 400.4 | 111.4 | 221.3 | 0.0 | 55 | 0.0 |
| 12/31/2007 | 0.0 | 383.1 | 116.5 | 250.8 | 0.0 | 65 | 0.0 |
| 12/31/2008 | 0.0 | 388.5 | 105.6 | 183.8 | 0.0 | 47 | 0.0 |
| 12/31/2009 | 0.0 | 400.3 | 110.8 | 214.1 | 0.0 | 53 | 0.0 |
| 12/31/2010 | 0.0 | 415.0 | 132.1 | 232.3 | 0.0 | 56 | 0.0 |
| 12/31/2011 | 0.0 | 332.5 | 128.6 | 239.6 | 0.0 | 72 | 0.0 |
| 12/31/2012 ${ }^{1}$ | 0.0 | 338.3 | 133.5 | 291.6 | 0.0 | 86 | 0.0 |
| 12/31/2013 | 0.0 | 348.0 | 125.6 | 353.5 | 0.0 | 100 | 4.0 |
| 12/31/2014 | 0.0 | 355.1 | 113.3 | 395.9 | 0.0 | 100 | 36.0 |

## Retiree Health Insurance Premium Account (RHIPA) (dollar amounts in millions) ${ }^{2}$

| Actuarial Accrued Liability |  |  |  | Valuation <br> Assets | Portion of Actuarial Accrued Liabilities Covered by Assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valuation Date | Active <br> Member Contributions | Retired <br> Members and Beneficiaries | Other <br> Members |  |  |  |  |
|  | (1) | (2) | (3) |  | (1) | (2) | (3) |
| 12/31/2005 | \$ 0.0 | \$ 9.8 | \$ 17.2 | \$ 6.1 | 0\% | 62\% | 0\% |
| 12/31/2006 | 0.0 | 8.1 | 15.3 | 7.0 | 0 | 86 | 0 |
| 12/31/2007 | 0.0 | 7.3 | 15.9 | 7.8 | 0 | 100 | 3 |
| 12/31/2008 | 0.0 | 7.5 | 13.7 | 5.7 | 0 | 76 | 0 |
| 12/31/2009 | 0.0 | 9.7 | 14.9 | 6.4 | 0 | 66 | 0 |
| 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 |

[^10]
## Oregon Public Employees Retirement System

## Plan Summary

## 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 the PERS administrative office.

| Membership | All employees of public employers participating in this System who are in qualifying positions become members of the System after completing six months of service except those who are eligible for and have elected to participate in an optional retirement plan. Different benefit provisions of the plan apply based on date of hire. |  |
| :---: | :---: | :---: |
|  | Tier One | Hired p |
|  | Tier Two | Hired |
|  | OPSRP | Hired member |
|  | Judges | Member |
| Employee | Judges | 7 perce |
|  | All others | None |
| Employer Contributions | Set by the PERS Board based on actuarial calculations that follow Board rate-setting policies for employers. |  |

## Summary of Chapter 238 Provisions - Tier One/Tier Two and Judges



| Full Formula | The percentage multiplier from the table below multiplied by final average salary and years of credited service, plus a prior service pension, if applicable. |
| :---: | :---: |
|  | Percentage Multiplier Membership Classification |
|  | 2.00 percent Police and Fire; Legislators |
|  | 1.67 percent All other members |
| Money Match | The member's account balance and a matching employer amount converted to an actuarially equivalent annuity. |
| Formula Plus Annuity | The member's account balance converted to an actuarially equivalent cash refund annuity plus the percentage multiplier from the table below multiplied by final average pay and years of credited service, plus a prior service pension, if applicable. |
|  | Percentage Multiplier Membership Classification |
|  | 1.35 percent Police and Fire; Legislators |
|  | 1.00 percent All other members |
| Judges | Final average salary multiplied by the first percentage multiplier from the table below for up to 16 years of service plus the second percentage multiplier for any service in excess of 16 years, but not to exceed the maximum percentage of final average salary also shown below. Judges must elect Plan A or Plan B no later than age 60. A "Plan B" judge must serve as a pro tem judge for a total of 175 days postretirement. |

\(\left.$$
\begin{array}{ccccc}\hline & & & \begin{array}{c}\text { Maximum } \\
\text { Percentage of } \\
\text { Final }\end{array} \\
\text { Percentage Factor } \\
\text { (up to 16 years) }\end{array}
$$ \quad \begin{array}{c}Percentage Factor <br>

(after 16 years)\end{array}\right]\)| Average Pay |
| :---: |
|  |
|  |
|  |
| Plan |
| B |


| Final Average Salary | The greater of: <br> - 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. <br> - Total salary earned over the last 36 months of employment divided by the actual months of service during that 36 -month period. <br> Covered salary for this purpose includes the value of member contributions assumed and paid by employers, any payment due to an employer's participation in the Unused Sick Leave program, and, for Tier One members, lump-sum payment of unused vacation time. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Creditable Service | The number of years and months an active member is paid a salary by a participating PERS employer and PERS benefits are being funded. |  |  |  |
| Prior Service <br> Pension | Benefits payable on account of Prior Service Credit for a member's service with a participating employer prior to the employer's participation in PERS, as described in ORS 238.442. |  |  |  |
| SB 656/HB 3349 <br> Adjustment | All members receive an increase to their monthly retirement benefit equal to the greater of the increase under Senate Bill 656 (SB 656) or House Bill 3349 (HB 3349). The adjustment for SB 656 only applies to members who established membership prior to July 14, 1995. Senate Bill 822, enacted in 2013, limits eligibility for these adjustments to only PERS beneficiaries who pay Oregon state income tax. |  |  |  |
|  | SB 656 Increase | Years of Service | General Service | Police and Fire |
|  |  | 0-9 | 0.0\% | 0.0\% |
|  |  | 10-14 | 1.0 | 1.0 |
|  |  | 15-19 | 1.0 | 1.0 |
|  |  | 20-24 | 2.0 | 2.5 |
|  |  | 25-29 | 3.0 | 4.0 |
|  |  | 30 and over | 4.0 | 4.0 |

3349

| Increase | 1 |  | Service prior to October 1, 1991 |
| :---: | :---: | :---: | :---: |
|  | 1 - maximum Oregon personal income tax rate (limited to 9\%) | -1 X | All Service |


| Early Retirement <br> Eligibility | Police and Fire <br> Judges <br> General Service | Age 50 or 30 years of service <br> Age 60 |
| :--- | :--- | :--- |
|  | Age or 30 years of service |  |

## Oregon Public Employees Retirement System

Summary of Chapter 238 Provisions - Tier One/ Tier Two and Judges (continued)

| Optional Forms of <br> Retirement <br> Allowance | The normal form of benefit is a cash refund annuity (joint and two-thirds survivor contingent annuity for <br> a married judge). All optional amounts are adjusted to be actuarially equivalent. <br> Options Available |
| :--- | :--- | :--- |
|  | - Life annuity |

Disability The normal retirement allowance calculated based on the service credit that would have been earned Benefits if the member had continued working to age 58 (age 55 for police and fire, age 65 for judge members) payable commencing immediately.

## Police and Fire Members' Alternative

In lieu of the above, police officers and firefighters who qualify for duty disability may elect to receive a benefit of 50 percent of final average monthly salary at the time of disablement.
Minimum Monthly Retirement Allowance
Judges 45 percent of final average monthly salary.
All others $\$ 100$ for a member with at least 15 years of credited service, actuarially reduced if an optional form of benefit is chosen.

## Reduction of Benefits

Whenever a disabled employee's disability benefit and earned income for any month exceed the monthly salary received at the time of disablement or $\$ 400$, if greater, the disability benefit will be reduced by the excess.
For Tier Two members, the disability benefit may not exceed the member's salary at the time of disablement.
Waiting Time Service Members with at least 10 years of combined credited and/or prior service under PERS may elect to Purchases 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.

## Summary of Chapter 238 Provisions - Tier One/Tier Two and Judges (continued)

| Police and Fire Unit <br> Purchases |
| :--- |
|  |
| Automatic Postretire- |
| ment Cost of Living |
| Adjustments (COLAs) |

Police and 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.

All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in Moro v. State of Oregon, automatic postretirement adjustments are based on a blended COLA as described below.
Automatic COLA prior to Benefits are adjusted annually to reflect the increase or decrease in the Consumer Price SB 822 and SB 861 Index (Portland area - all items) as published by the Bureau of Labor Statistics.

The maximum adjustment to be made for any year is 2 percent of the previous year's benefit, except for 2013 when the adjustment is limited to 1.5 percent. Any CPI change in excess of the limit is accumulated for future benefit adjustments that would otherwise be less than the limit. No benefit will be decreased below its original amount.

## Automatic <br> Adjustments Post-2013

In 2014 and future years benefits will be increased annually based on a marginal rate schedule. The increase is calculated as 1.25 percent on the first $\$ 60,000$ of annual benefit and 0.15 percent on amounts above $\$ 60,000$ of annual benefit.
Blended COLA after
The Supreme Court decision in Moro requires that members "will be entitled to receive during retirement a blended COLA rate that reflects the different COLA provisions applicable to benefits earned at different times." The Supreme Court did not articulate a specific methodology for determining the blended COLA. For purposes of this valuation, we have determined the blend based on creditable service earned before and after October 2013. This approach is consistent with OAR 459-0050510 adopted by the PERS Board in September 2015.

| Ad Hoc Adjustments |  | From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits. |
| :---: | :---: | :---: |
| Variable Annuity Program | Contributions | Prior to January 1, 2004, a member could elect to have 25,50 , or 75 percent of his or her contributions invested in the variable account. |
|  | Benefit | At retirement, a member may elect to receive a variable annuity with the funds accumulated in his or her variable account. |
|  |  | Alternatively, a member may elect to have all or a portion of the funds in his or her variable account transferred back to the regular account and receive an annuity from the System as though no variable annuity program existed. |
|  |  | The employer-provided benefit, however, is based on the earnings the member would have received in the regular account. |
| Interest Credit on <br> Member Accounts | Tier One 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 Two Regular | Amount determined by the Board based on actual investment earnings of the regular account. |
|  | Variable | Actual earnings in variable account |
| Retiree Healthcare Medicare Supplement (RHIA) | Retiree Eligibility | All of the following must be met: <br> (a) Currently receiving a retirement allowance from the System, <br> (b) Covered for eight years before retirement, <br> (c) Enrolled in a PERS-sponsored health plan, and <br> (d) Enrolled in both Medicare Part A and Part B. |
|  | Surviving Spouse or Dependent Eligibility | A surviving spouse or dependent of a deceased RHIA-eligible retiree is eligible for RHIA benefits if they are enrolled in both Medicare Part A and Part B, and either of the following criteria are met: <br> (a) currently receiving a retirement allowance from the System, or <br> (b) the surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health insurance at the time of the retiree's death, and the deceased retiree retired before May 1, 1991. |
|  | Benefit Amount | A monthly contribution of up to $\$ 60$ per retiree is applied to PERS-sponsored Medicare supplemental insurance costs. |
| Retiree Healthcare Under Age 65 (RHIPA) (RHIPA) | Retiree Eligibility | Retired PERS members who were state employees at the time of retirement, are enrolled in a PERS-sponsored health plan, and are not eligible for Medicare. |

## Oregon Public Employees Retirement System

Summary of Chapter 238 Provisions - Tier One/Tier Two and Judges (continued)
Surviving Spouse A surviving spouse or dependent of a deceased RHIPA-eligible retiree is eligible for RHIPA or Dependent benefits if they are not yet eligible for Medicare, and either of the following criteria are met: Eligibility
(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.

|  | 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 and over | 100 |
| Changes in Plan Provisions | 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 benefits projected to be paid and consequently increased plan liabilities. |  |


| Normal Retirement Age | Police and Fire General Service School Districts | Age 60 or age 53 with 25 years of retirement credit Age 65 or age 58 with 30 years of retirement credit Age 65 or age 58 with 30 calendar years of active membership |
| :---: | :---: | :---: |
| Normal Retirement Allowance | A single life annuity equal to final average salary times years of retirement credit attributable to service as police and fire times 1.8 percent plus final average salary times all other years of retirement credit times 1.5 percent. |  |
| Final Average Salary | The greater of: <br> - 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. <br> - Total salary earned over the last 36 months of employment divided by the actual months of service during that 36 -month period. <br> Covered salary for this purpose includes base pay, plus overtime up to an average amount, plus bonuses, plus member contributions paid by the employer on a salary reduction basis. Excludes payments of unused vacation or accumulated sick leave at retirement and member contributions assumed and paid by the employer. |  |
| Early Retirement Eligibility | Police and Fire | Age 50 and 5 years of vesting service |
|  | General Service | Age 55 and 5 years of vesting service |
| Early Retirement Allowance | Normal retirement allowance, actuarially reduced to early retirement age. |  |
| Vesting | Five years or attainment of normal retirement age. |  |
| Vested Termination Benefit | Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date. |  |
| Optional Forms of Retirement Benefit | The normal form of benefit is a life annuity. All optional amounts are adjusted to be actuarially equivalent. |  |
|  | Options Available <br> - Life annuity <br> - Joint and 50 percent or 100 percent survivor contingent benefit, with or without pop-up feature. <br> - Lump sum if monthly normal retirement benefit is less than $\$ 200$ or if lump-sum value is less than $\$ 5,000$. |  |
| Pre-Retirement Death Benefit Eligibility | Death of a vested member before retirement benefits begin. |  |
| Pre-Retirement Death Benefit | If member was eligible for early retirement, the actuarial equivalent of 50 percent 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 percent of the early retirement benefit the participant would have been eligible to receive if he terminated employment on his date of death and retired at the earliest possible date. |  |
| Disability Benefit Eligibility | Duty | Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service. |
|  | Non-Duty | Disablement occurring after 10 years of service, but prior to normal retirement eligibility. |

Automatic COLA Benefits are adjusted annually to reflect the increase or decrease in the prior to SB 822 and Consumer Price Index (Portland area - all items) as published by the SB 861 Bureau of Labor Statistics.

The maximum adjustment to be made for any year is 2 percent of the previous year's benefit, except for 2013 when the adjustment is limited to 1.5 percent. Any CPI change in excess of 2 percent is accumulated for future benefit adjustments that would otherwise be less than 2 percent. No benefit will be decreased below its original amount.

## Automatic <br> Adjustments provided by SB 822 and SB 861

In 2014 and future years benefits will be increased annually based on a marginal rate schedule. The increase is calculated as 1.25 percent on the first $\$ 60,000$ of annual benefit and 0.15 percent on amounts above $\$ 60,000$ of annual benefit.

Changes in Plan Provisions

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 benefits projected to be paid and consequently increased plan liabilities

## 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 understand 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, 2015, 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 |  |  |  |
| 2006 | \$ | 9,611,666 | \$ | 783,921,381 | 12.70 \% | \$ | 6,919,097,410 | \$ 6,919,097,410 |
| 2007 |  | 13,680,980 |  | 597,372,229 | 8.70 |  | 10,589,123,834 | 10,589,123,834 |
| 2008 |  | 11,937,362 |  | 763,164,823 | 10.30 |  | (2,804,736,029) | (2,804,736,029) |
| 2009 |  | 8,452,030 |  | 649,706,891 | 7.88 |  | $(12,903,220,545)$ | (12,903,220,545) |
| 2010 |  | 13,600,476 |  | 433,268,434 | 4.88 |  | 7,279,890,664 | 7,279,890,664 |
| 2011 |  | 14,024,484 |  | 424,101,414 | 5.30 |  | 10,931,390,952 | 10,931,390,952 |
| 2012 |  | 16,534,650 |  | 1,455,729,689 | 9.69 |  | 380,749,755 | 380,749,755 |
| 2013 |  | 16,985,722 |  | 834,161,587 | 10.26 |  | 6,949,742,064 | 6,949,742,064 |
| 2014 |  | 15,319,270 |  | 915,236,878 | 10.54 |  | 9,886,700,639 | 9,886,700,639 |
| 2015 |  | 13,785,439 |  | 1,123,256,703 | 12.25 |  | 2,364,479,372 | 3,501,521,514 |

Oregon Public Service Retirement Plan
Individual Account Program

| Fiscal Year | Member Contributions |  | Employer Contributions |  |  | Net Investment and Other Income |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dollars |  | Percent of Annual Covered Payroll |  |  |  |  |
| 2006 | \$ | 417,555,791 | \$ | N/A | N/A\% | \$ | 139,735,992 | \$ | 57,291,783 |
| 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 |

Deferred Compensation Plan

| Fiscal Year | Member Contributions |  | Employer Contributions |  |  | Net Investment and Other Income |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Dollars |  | Percent of Annual Covered Payroll |  |  |  |  |
| 2006 | \$ | 59,724,202 | \$ | N/A | N/A\% | \$ | 70,672,287 | \$ | 130,396,489 |
| 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 |

[^11]
## Oregon Public Employees Retirement System

## Deductions by Type - Retirement Programs

For the Last Ten Years Ended June 30:

Defined Benefit Pension Plan

| Fiscal <br> Year | Benefits | Administrative <br> Expenses $^{1}$ | Refunds | Total |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| 2006 | $\$$ | $2,371,628,570$ | $\$ 24,350,573$ | $\$$ | $33,172,837$ | $\$$ |
| 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 | $3,927,167,032$ | $35,739,837$ | $16,481,215$ | $3,979,388,084$ |  |  |

Oregon Public Service Retirement Plan Individual Account Program

| Fiscal <br> Year | Benefits <br> Administrative <br> Expenses |  |  |  | Total |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 2006 | $\$$ | $14,791,999$ | $\$$ | $6,237,195$ | $\$$ |
| 2007 |  | $36,379,230$ |  | $7,291,683$ |  |
| 2008 | $55,478,104$ | $7,871,419$ |  | $43,670,9194$ |  |
| 2009 | $49,534,423$ | $8,413,392$ |  | $63,349,523$ |  |
| 2010 | $72,802,216$ | $7,673,682$ |  | $87,947,815$ |  |
| 2011 | $133,970,603$ | $6,810,487$ |  | $140,75,898$ |  |
| 2012 | $224,729,644$ | $7,698,098$ | $232,427,742$ |  |  |
| 2013 | $241,326,511$ | $7,093,871$ | $248,420,382$ |  |  |
| 2014 | $330,535,801$ | $6,934,980$ | $337,470,781$ |  |  |
| 2015 | $319,978,740$ | $7,565,611$ | $327,544,351$ |  |  |

Deferred Compensation Plan

| Fiscal <br> Year | Benefits | Administrative <br> Expenses | Total |  |  |
| :---: | ---: | ---: | ---: | ---: | :--- |
| 2006 | $\$$ | $40,544,067$ | $\$$ | 884,438 | $\$$ |
| 2007 | $49,835,260$ |  | 606,410 | $41,428,505$ |  |
| 2008 | $50,366,273$ | 800,668 | $50,441,670$ |  |  |
| 2009 | $38,858,335$ | 816,033 | $51,166,941$ |  |  |
| 2010 | $45,901,913$ | 889,647 | $39,674,368$ |  |  |
| 2011 | $55,929,452$ | $1,326,224$ | $46,791,560$ |  |  |
| 2012 | $61,465,377$ | 417,776 | $57,255,676$ |  |  |
| 2013 | $70,550,942$ | 874,584 | $61,883,153$ |  |  |
| 2014 | $89,652,030$ | 997,202 | $71,425,526$ |  |  |
| 2015 | $84,177,564$ | $1,018,468$ | $90,649,232$ |  |  |
|  |  |  |  | $85,196,032$ |  |

[^12]
## Changes in Fiduciary Net Position - Retirement Programs For the Last Ten Years Ended June 30:

Defined Benefit Pension Plan

|  |  |  |  | Net Position $^{1}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal <br> Year | Additions | Deductions | Net Change | Beginning of Year | End of Year |  |
| 2006 | $\$$ | $7,712,630,457$ | $\$$ | $2,429,151,980$ | $\$$ | $5,283,478,477$ |
| 2007 | $11,200,177,043$ | $2,645,026,343$ |  | $\$, 555,150,700$ | $49,688,691,358$ | $\$$ |
| 2008 | $(2,029,633,844)$ | $2,846,027,119$ | $(4,875,660,963)$ | $54,972,169,835$ | $63,52,169,835$ |  |
| 2009 | $(12,245,061,624)$ | $2,852,963,103$ | $(15,098,024,727)$ | $63,527,320,535$ | $58,651,659,572$ |  |
| 2010 | $7,726,759,574$ | $2,969,773,548$ | $4,756,986,026$ | $58,651,659,572$ | $43,553,634,845$ |  |
| 2011 | $11,369,516,850$ | $3,259,682,742$ | $8,109,834,108$ | $43,553,634,845$ | $48,310,620,871$ |  |
| 2012 | $1,227,407,810$ | $3,362,832,935$ | $(2,135,425,125)$ | $58,310,620,871$ | $56,420,454,979$ |  |
| 2013 | $7,800,889,373$ | $3,607,005,495$ | $4,193,883,878$ | $54,285,029,854$ | $54,285,029,854$ |  |
| 2014 | $10,817,256,787$ | $3,894,677,855$ | $6,922,578,932$ | $58,478,913,732$ | $65,401,492,664$ |  |
| 2015 | $3,501,521,514$ | $3,979,388,084$ | $(477,866,570)$ | $65,401,492,664$ | $64,923,626,094$ |  |

## Oregon Public Service Retirement Plan

Individual Account Program

|  |  |  |  | Net Position |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Fiscal <br> Year | Additions | Deductions | Net Change | Beginning of Year | End of Year |  |
| 2006 | $\$$ | $557,291,783$ | $\$$ | $21,029,194$ | $\$$ | $536,262,589$ |
| 2007 | $748,847,114$ | $43,670,913$ | $\$ 05,176,201$ | $635,258,658$ | $\$$ | $1,171,521,247$ |
| 2008 | $410,921,686$ | $63,349,523$ | $347,572,163$ | $1,171,521,247$ | $1,876,697,448$ |  |
| 2009 | $(57,213,020)$ | $57,947,815$ | $(115,160,835)$ | $1,876,697,448$ | $2,224,269,611$ |  |
| 2010 | $899,573,854$ | $80,475,898$ | $819,097,956$ | $2,224,269,611$ | $2,109,108,776$ |  |
| 2011 | $1,249,411,006$ | $140,781,090$ | $1,108,629,916$ | $2,109,108,776$ | $2,928,206,732$ |  |
| 2012 | $587,710,894$ | $232,427,742$ | $355,283,152$ | $2,928,206,732$ | $4,036,836,648$ |  |
| 2013 | $1,146,146,060$ | $248,420,382$ | $897,725,678$ | $4,036,836,648$ | $4,392,119,800$ |  |
| 2014 | $1,504,742,569$ | $337,470,781$ | $1,167,271,788$ | $4,392,119,800$ | $5,289,845,478$ |  |
| 2015 | $840,366,873$ | $327,544,351$ | $512,822,522$ | $5,289,845,478$ | $6,457,117,266$ |  |
|  |  |  |  | $6,457,117,266$ | $6,969,939,788$ |  |

Deferred Compensation Plan

|  |  |  |  | Net Position |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Fiscal <br> Year | Additions | Deductions | Net Change | Beginning of Year | End of Year |  |
| 2006 | $\$$ | $130,396,489$ | $\$$ | $41,428,505$ | $\$$ | $88,967,984$ |
| 2007 | $195,664,066$ | $50,441,670$ | $145,222,396$ | $743,210,657$ | $\$$ | $832,178,641$ |
| 2008 | $(3,581,632)$ | $51,166,941$ | $(54,748,573)$ | $832,178,641$ | $977,401,037$ |  |
| 2009 | $(75,371,982)$ | $39,674,368$ | $(115,046,350)$ | $977,401,037$ | $922,652,464$ |  |
| 2010 | $151,126,171$ | $46,791,560$ | $104,334,611$ | $922,652,464$ | $807,606,114$ |  |
| 2011 | $250,291,207$ | $57,255,676$ | $193,035,531$ | $807,606,114$ | $911,940,725$ |  |
| 2012 | $90,474,528$ | $61,883,153$ | $28,591,375$ | $1,104,970,725$ | $1,104,976,256$ |  |
| 2013 | $209,821,007$ | $71,425,526$ | $138,395,481$ | $1,133,567,631$ | $1,133,567,631$ |  |
| 2014 | $295,355,933$ | $90,649,232$ | $204,706,701$ | $1,271,963,112$ | $1,476,963,112$ |  |
| 2015 | $148,414,167$ | $85,196,032$ | $63,218,135$ | $1,476,669,813$ | $1,539,887,948$ |  |

[^13]
## Oregon Public Employees Retirement System

## Additions by Source - OPEB

For the Last Ten Years Ended June 30:

Retirement Health Insurance Account

|  | Employer Contributions |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{c}\text { Fiscal } \\ \text { Year }\end{array}$ | Dollars | $\begin{array}{c}\text { Percent of Annual } \\ \text { Covered Payroll }\end{array}$ |  | $\begin{array}{c}\text { Net Investment } \\ \text { and Other Income }\end{array}$ | Total |
| 2006 | $\$$ | $38,162,075$ | $0.59 \%$ | $\$$ | $23,296,256$ |$) \$$| $61,458,331$ |
| :---: |
| 2007 |

Retiree Health Insurance Premium Account

| Fiscal Year | Employer Contributions |  |  | Net Investment and Other Income |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Dollars | Percent of Annual Covered Payroll |  |  |  |  |
| 2006 | \$ | 2,190,254 | 0.13\% | \$ | 777,757 | \$ | 2,968,011 |
| 2007 |  | 2,399,843 | 0.13 |  | 1,301,049 |  | 3,700,892 |
| 2008 |  | 1,791,179 | 0.10 |  | $(312,725)$ |  | 1,478,454 |
| 2009 |  | 2,005,173 | 0.10 |  | $(1,578,384)$ |  | 426,789 |
| 2010 |  | 1,496,640 | 0.08 |  | 939,274 |  | 2,435,914 |
| 2011 |  | 1,428,453 | 0.08 |  | 1,135,114 |  | 2,563,567 |
| 2012 |  | 3,378,230 | 0.13 |  | 16,723 |  | 3,394,953 |
| 2013 |  | 3,443,805 | 0.14 |  | 499,279 |  | 3,943,084 |
| 2014 |  | 6,149,608 | 0.24 |  | 739,056 |  | 6,888,664 |
| 2015 |  | 6,887,258 | 0.25 |  | 266,949 |  | 7,154,207 |

## Deductions by Type - OPEB

For the Last Ten Years Ended June 30:

Retirement Health Insurance Account

| Fiscal <br> Year | Benefits | Administrative <br> Expensess | Total |  |
| :---: | ---: | ---: | ---: | :--- |
| 2006 | $\$$ | $26,059,316$ | $\$$ | 887,743 |
| 2007 | $26,887,060$ | 876,363 | $\$$ | $26,947,059$ |
| 2008 | $27,624,361$ | 899,601 | $27,763,423$ |  |
| 2009 | $28,262,580$ | 958,311 | $28,523,962$ |  |
| 2010 | $28,821,539$ | 974,988 | $29,220,891$ |  |
| 2011 | $29,251,771$ | $1,039,603$ | $29,796,527$ |  |
| 2012 | $29,935,920$ | 963,843 | $30,291,374$ |  |
| 2013 | $30,777,470$ | $1,149,475$ | $30,899,763$ |  |
| 2014 | $34,112,567$ | $1,044,937$ | $31,926,945$ |  |
| 2015 | $31,922,820$ | $1,279,427$ | $35,157,504$ |  |
|  |  |  | $33,202,247$ |  |

Retirement Health Insurance Premium Account

| Fiscal <br> Year | Benefits | Administrative <br> Expensess | Total |  |
| :---: | ---: | ---: | ---: | ---: |
| 2006 | $\$$ | $2,120,368$ | $\$$ | 143,252 |
| 2007 | $2,047,322$ | 119,875 | $2,263,620$ |  |
| 2008 | $1,906,431$ | 104,880 | $2,167,197$ |  |
| 2009 | $1,926,236$ | 115,770 | $2,011,311$ |  |
| 2010 | $2,307,058$ | 103,645 | $2,042,006$ |  |
| 2011 | $3,024,382$ | 161,559 | $2,410,703$ |  |
| 2012 | $3,885,769$ | 71,981 | $3,185,941$ |  |
| 2013 | $4,093,736$ | 169,137 | $3,957,750$ |  |
| 2014 | $4,925,743$ | 170,901 | $4,262,873$ |  |
| 2015 | $4,230,808$ | 188,598 | $5,096,644$ |  |
|  |  |  | $4,419,406$ |  |

## Oregon Public Employees Retirement System

## Changes in Fiduciary Net Position - OPEB <br> For the Last Ten Years Ended June 30:

## Retirement Health Insurance Account

| Fiscal Year | Additions |  | Deductions |  | Net Change |  | Fiduciary Net Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Beginning of Year | End of Year |  |
| 2006 | \$ | 61,458,331 |  |  | \$ | 26,947,059 | \$ | 34,511,272 | \$ | 161,190,795 | \$ | 195,702,067 |
| 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 |

## Retiree Health Insurance Premium Account

| Fiscal Year | Additions |  | Deductions |  | Net Change |  | Fiduciary Net Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Beginning of Year | End of Year |  |
| 2006 | \$ | 2,968,011 |  |  | \$ | 2,263,620 | \$ | 704,391 | \$ | 5,629,330 | \$ | 6,333,721 |
| 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 |

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

Defined Benefit Pension Plan

| Calendar Year | Member Contributions |  | Employer Contributions |  |  | Net Investment and Other Income |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Dollars ${ }^{2}$ | Percent of Annual <br> Covered Payroll |  |  |  |  |
| 2005 | \$ | 8,354,073 | \$ | 1,165,678,216 | 18.51\% | \$ | 6,045,479,892 | \$ | 7,219,512,181 |
| 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 |

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 |  |  |  |  |
| 2005 | \$ | 426,126,034 | \$ | N/A | N/A\% | \$ | 112,037,318 | \$ | 538,163,352 |
| 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 |

Deferred Compensation Plan

| Calendar Year | Member Contributions |  |  | Employer Contributions |  | Net Investment and Other Income |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Dollars | Percent of Annual Covered Payroll |  |  |  |  |
| 2005 | \$ | 56,557,468 | \$ | N/A | N/A\% | \$ | 49,783,696 | \$ | 106,341,164 |
| 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 |

[^14]
## Oregon Public Employees Retirement System

## Deductions by Type - Retirement Programs <br> For the Years Ended December 31¹:

Defined Benefit Pension Plan

| Calendar <br> Year | Benefits | Administrative <br> Expenses $^{2}$ | Refunds | Total |  |  |
| :---: | :--- | :--- | ---: | :--- | ---: | :--- |
| 2005 | $\$$ | $2,372,895,822$ | $\$$ | $30,659,957$ | $\$$ | $42,143,663$ |
| 2006 | $2,514,479,244$ | $24,438,769$ | $\$$ | $2,445,699,442$ |  |  |
| 2007 | $2,630,279,015$ | $31,358,911$ | $38,197,392$ | $2,599,977,373$ |  |  |
| 2008 | $2,784,164,757$ | $24,645,591$ | $27,117,003$ | $2,699,835,318$ |  |  |
| 2009 | $2,823,723,754$ | $26,011,412$ | $18,269,906$ | $2,835,927,351$ |  |  |
| 2010 | $3,053,863,566$ | $29,126,521$ | $17,996,148$ | $2,868,005,072$ |  |  |
| 2011 | $3,351,517,947$ | $29,244,166$ | $38,369,101$ | $3,100,986,235$ |  |  |
| 2012 | $3,351,430,408$ | $31,807,897$ | $17,970,250$ | $3,419,131,214$ |  |  |
| 2013 | $3,708,827,767$ | $34,271,919$ | $25,529,913$ | $3,401,208,555$ |  |  |
| 2014 | $3,888,166,333$ | $35,187,183$ | $17,850,587$ | $3,768,629,599$ |  |  |
|  |  |  |  | $3,941,204,103$ |  |  |

Oregon Public Service Retirement Plan
Individual Account Program

| Calendar <br> Year | Benefits | Administrative <br> Expenses |  |  | Total |
| :---: | ---: | ---: | ---: | ---: | ---: |
| 2005 | $\$$ | $3,682,712$ | $\$$ | $4,177,338$ | $\$$ |
| 2006 | $30,051,229$ | $8,061,455$ |  | $7,860,050$ |  |
| 2007 | $47,529,077$ | $7,583,898$ |  | $38,112,684$ |  |
| 2008 | $58,765,223$ | $8,183,279$ | $5,112,975$ |  |  |
| 2009 | $53,171,640$ | $7,905,631$ | $66,948,502$ |  |  |
| 2010 | $95,293,228$ | $7,822,430$ | $61,077,271$ |  |  |
| 2011 | $196,350,366$ | $8,363,154$ | $103,115,658$ |  |  |
| 2012 | $218,180,975$ | $5,528,973$ |  | $204,713,520$ |  |
| 2013 | $301,297,929$ | $7,164,598$ | $223,709,948$ |  |  |
| 2014 | $332,722,945$ | $7,315,352$ | $308,462,527$ |  |  |
|  |  |  |  | $340,038,297$ |  |

## Deferred Compensation Plan

| Calendar <br> Year | Benefits | Administrative <br> Expenses | Total |  |
| :---: | ---: | ---: | ---: | ---: |
| 2005 | $\$$ | $38,351,898$ | $\$$ | 878,538 |
| 2006 | $40,706,739$ | 684,991 |  | $39,230,436$ |
| 2007 | $50,697,210$ | 763,382 | $41,391,730$ |  |
| 2008 | $47,955,641$ | 795,233 | $51,460,592$ |  |
| 2009 | $37,366,503$ | 863,699 | $48,750,874$ |  |
| 2010 | $46,759,679$ | 804,345 | $38,230,202$ |  |
| 2011 | $60,816,774$ | 963,874 | $47,564,024$ |  |
| 2012 | $65,498,582$ | 783,755 | $61,780,648$ |  |
| 2013 | $79,075,903$ | 982,625 | $66,282,337$ |  |
| 2014 | $92,995,075$ | 998,023 | $80,058,528$ |  |
|  |  |  | $93,993,098$ |  |

[^15]
## Changes in Fiduciary Net Position - Retirement Programs <br> For the Last Ten Years Ended December 31 ${ }^{1,2}$ :

## Defined Benefit Pension Plan ${ }^{3}$

| Calendar Year | Additions |  | Deductions |  | Net Change |  | Net Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | inning 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 |  | 3,768,629,599 |  | 6,341,871,339 |  | 53,371,988,034 |  | 59,713,859,373 |
| 2014 |  | 5,293,707,597 |  | 3,941,221,786 |  | 1,352,485,811 |  | 62,163,418,324 |  | 63,515,904,135 |

## Oregon Public Service Retirement Plan

## Individual Account Program

|  |  |  |  | Net Position |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Calendar <br> Year | Additions | Deductions | Net Change | Beginning of Year | End of Year |  |
| 2005 | $\$$ | $538,163,352$ | $\$$ | $7,860,050$ | $\$$ | $530,303,302$ |
| 2006 | $657,172,054$ |  | $38,112,684$ | $619,059,370$ | $405,107,307$ | $\$$ |
| 2007 | $649,052,858$ | $55,112,975$ | $593,939,883$ | $935,410,609$ |  |  |
| 2008 | $(204,816,680)$ | $66,948,502$ | $(271,765,182)$ | $1,554,469,609$ | $1,554,469,979$ | $2,148,409,862$ |
| 2009 | $940,198,020$ | $61,077,271$ | $879,120,749$ | $1,876,409,862$ | $1,876,644,680$ |  |
| 2010 | $903,205,036$ | $103,115,658$ | $800,089,378$ | $2,755,765,429$ | $2,755,765,429$ |  |
| 2011 | $614,258,421$ | $204,713,520$ | $409,544,901$ | $3,555,854,807$ | $3,955,854,807$ |  |
| 2012 | $1,122,991,607$ | $223,709,948$ | $899,281,659$ | $3,965,399,708$ | $4,864,681,708$ |  |
| 2013 | $1,357,494,695$ | $308,462,527$ | $1,049,032,168$ | $4,864,681,367$ | $5,913,713,535$ |  |
| 2014 | $961,135,579$ | $340,038,297$ | $621,097,282$ | $5,913,713,535$ | $6,534,810,817$ |  |

Deferred Compensation Plan

| Calendar Year | Additions |  | Deductions |  | Net Change |  | Net Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | inning of Year |  |  |  | End of Year |
| 2005 | \$ | 106,341,164 |  |  | \$ | 39,230,436 | \$ | 67,110,728 | \$ | 727,485,804 | \$ | 794,596,532 |
| 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 |

[^16]
## Oregon Public Employees Retirement System

## Additions by Source - OPEB

For the Years Ended December 31¹:

Retirement Health Insurance Account
Employer Contributions

|  | $\begin{array}{c}\text { Employer Contributions } \\ \text { Calendar } \\ \text { Year }\end{array}$ |  | Dollars | $\begin{array}{c}\text { Percent of Annual } \\ \text { Covered Payroll }\end{array}$ | $\begin{array}{c}\text { Net Investment } \\ \text { and Other Income }\end{array}$ |
| :---: | :---: | :---: | :---: | ---: | :---: |
| 2005 | $\$$ | $39,202,772$ | $0.58 \%$ | $\$$ | $20,112,501$ |$) \$$| Total |
| :---: |
| 2006 |

Retiree Health Insurance Premium Account

|  | Employer Contributions |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Calendar <br> Year | Dollars | Percent of Annual <br> Covered Payroll |  | Net Investment <br> and Other Income | Total |
| 2005 | $\$$ | $2,454,389$ | $0.13 \%$ | $\$$ | 679,346 |
| 2006 | $2,284,194$ | 0.14 | $\$$ | $3,133,735$ |  |
| 2007 | $2,148,731$ | 0.03 | 920,910 | $3,205,104$ |  |
| 2008 | $1,867,402$ | 0.08 | 688,777 | $2,837,508$ |  |
| 2009 | $1,796,343$ | 0.08 | $(2,004,488)$ | $(137,086)$ |  |
| 2010 | $1,458,105$ | 0.06 | $1,016,811$ | $2,813,154$ |  |
| 2011 | $2,347,710$ | 0.10 | 659,794 | $2,117,899$ |  |
| 2012 | $3,450,509$ | 0.15 | 158,742 | $2,506,452$ |  |
| 2013 | $4,708,305$ | 0.19 | 557,438 | $4,007,947$ |  |
| 2014 | $6,378,015$ | 0.24 | 588,465 | $5,296,770$ |  |
|  |  |  | 361,915 | $6,739,930$ |  |

[^17]
## Deductions by Type - OPEB

For the Years Ended December 31':

Retirement Health Insurance Account

| Calendar <br> Year | Benefits | Administrative <br> Expenses | Total |  |
| :---: | ---: | ---: | ---: | ---: |
| 2005 | $\$$ | $25,601,296$ | $\$$ | 698,986 |
| 2006 | $26,552,598$ | 978,785 |  | $26,300,282$ |
| 2007 | $27,244,840$ | 888,308 | $27,531,383$ |  |
| 2008 | $27,976,500$ | 918,244 |  | $28,133,148$ |
| 2009 | $28,537,920$ | 974,580 | $28,894,744$ |  |
| 2010 | $29,066,220$ | 973,329 | $29,512,500$ |  |
| 2011 | $29,524,122$ | $1,283,144$ | $30,039,549$ |  |
| 2012 | $30,375,640$ | 837,282 | $30,807,266$ |  |
| 2013 | $31,132,920$ | $1,095,853$ | $31,212,922$ |  |
| 2014 | $31,636,379$ | $1,167,459$ | $32,228,773$ |  |
|  |  |  |  | $32,803,838$ |

Retiree Health Insurance Premium Account

| Calendar <br> Year | Benefits | Administrative <br> Expenses | Total |  |
| :---: | ---: | ---: | ---: | ---: |
| 2005 | $\$$ | $2,070,218$ | $\$$ | 117,939 |
| 2006 | $2,158,432$ | 140,794 |  | $2,188,157$ |
| 2007 | $1,923,159$ | 111,240 | $2,299,226$ |  |
| 2008 | $1,902,292$ | 101,664 |  | $2,034,399$ |
| 2009 | $2,020,198$ | 113,096 | $2,003,956$ |  |
| 2010 | $2,664,123$ | 106,791 | $2,133,294$ |  |
| 2011 | $3,547,400$ | 124,769 | $2,770,914$ |  |
| 2012 | $3,968,267$ | 134,246 | $3,672,169$ |  |
| 2013 | $4,323,159$ | 172,485 | $4,102,513$ |  |
| 2014 | $4,615,612$ | 180,524 | $4,495,644$ |  |
|  |  |  | $4,796,136$ |  |

[^18]
## Oregon Public Employees Retirement System

## Changes in Fiduciary Net Position - OPEB <br> For the Last Ten Years Ended December 31 ${ }^{1}$ :

## Retirement Health Insurance Account

| Calendar Year | Additions |  | Deductions |  | Net Change |  | Net Position |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | ing of Year |  |  |  | End of Year |
| 2005 | \$ | 59,315,273 |  |  | \$ | 26,300,282 | \$ | 33,014,991 | \$ | 147,847,469 | \$ | 180,862,460 |
| 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 |

Retiree Health Insurance Premium Account

|  |  |  | Net Position |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Calendar <br> Year | Additions | Deductions | Net Change | Beginning of Year | End of Year |  |
| 2005 | $\$$ | $3,133,735$ | $\$$ | $2,188,157$ | $\$$ | 945,578 |
| 2006 | $3,205,104$ | $2,299,226$ | 905,878 | $5,164,750$ | $\$$ | $6,110,328$ |
| 2007 | $2,837,508$ | $2,034,399$ | 803,109 | $7,016,206$ | $7,016,206$ |  |
| 2008 | $(137,086)$ | $2,003,956$ | $(2,141,042)$ | $7,819,315$ |  |  |
| 2009 | $2,813,154$ | $2,133,294$ | 679,860 | $5,819,315$ | $5,678,273$ |  |
| 2010 | $2,117,899$ | $2,770,914$ | $(653,015)$ | $6,678,273$ | $6,358,133$ |  |
| 2011 | $2,506,452$ | $3,672,169$ | $(1,165,717)$ | $5,358,133$ | $5,705,118$ |  |
| 2012 | $4,007,946$ | $4,102,513$ | $(94,567)$ | $4,539,118$ | $4,539,401$ |  |
| 2013 | $5,296,770$ | $4,495,644$ | 801,126 | $4,444,834$ | $4,444,834$ |  |
| 2014 | $6,739,930$ | $4,796,136$ | $1,943,794$ | $5,245,960$ | $5,245,960$ |  |
|  |  |  |  | $7,189,754$ |  |  |

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

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

|  |  | Service <br> Benefits | Disability Benefits |  |  |  | Retirement Benefit Totals |  | Death <br> Benefits |  | Refunds ${ }^{1}$ |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year |  |  |  | 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 |

1 Prior to fiscal year 2011, information to present refunds by type was not available and Death Refunds were combined with Normal Refunds.

## Schedule of Earnings and Crediting at December 31 ${ }^{1}$ :

|  | Tier One Earnings/ <br> (Loss) Available for <br> Crediting | Credited |  |  | Tier One |
| :---: | :---: | :---: | :---: | :---: | :---: |

1 Calendar year-end information is provided because earnings are credited as of December 31.
2 The Individual Account Program began in 2004 and was remediated in 2006 to reflect annual earnings credited for 2004 and 2005
3 Earnings rate includes allocation from settlement of Murray v. PERB litigation.
4 Earnings rate includes allocation from settlement of White, et. al. v. PERB litigation.

## Schedule of Average OPEB Benefits for Retirement Health Insurance Account ${ }^{1}$ For the Year Ended June 30, 2015:

| Years Credited Service | $8+$ |
| :--- | ---: |
| Average Monthly Benefit | $\$ 60$ |
| Final Average Salary | N/A |
| Number of Active Retirees | 44,629 |

## Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account ${ }^{1}$ For the Year Ended June 30, 2015:

|  | Years Credited Service |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 8-9 | 10-14 | 15-19 | 20-24 | 25-29 | $30+$ | Total |
| Average Monthly Benefit | \$162 | \$194 | \$226 | \$259 | \$291 | \$323 | \$296 |
| Final Average Salary | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Number of Active Retirees | 6 | 51 | 86 | 144 | 288 | 679 | 1,254 |

[^19]
## Oregon Public Employees Retirement System

Schedule of Average Defined Benefit Pension Payments
Retirement Effective Dates

| July 1, 2006 to June 30, 2015 | 0-5 | 6-10 | Years Credited Service |  |  | 26-30 | 31+ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 11-15 | 16-20 | 21-25 |  |  |  |
| 2006 Average Monthly Benefit | \$ 754 | \$ 901 | \$ 1,300 | \$ 1,930 | \$ 2,909 | \$ 4,172 | \$ 4,236 | \$ 2,467 |
| Final Average Salary | \$ 3,433 | \$ 3,134 | \$ 3,634 | \$ 3,954 | \$ 4,439 | \$ 5,024 | \$ 5,066 | \$ 4,166 |
| Number of Active Retirees | 178 | 496 | 619 | 634 | 615 | 868 | 222 | 3,632 |
| 2007 Average Monthly Benefit | \$771 | \$ 902 | \$ 1,289 | \$ 1,933 | \$ 2,748 | \$ 4,190 | \$ 4,658 | \$ 2,526 |
| Final Average Salary | \$ 3,181 | \$ 3,388 | \$ 3,729 | \$ 4,244 | \$ 4,613 | \$ 5,082 | \$ 5,414 | \$ 4,345 |
| Number of Active Retirees | 227 | 578 | 624 | 732 | 597 | 1,005 | 346 | 4,109 |
| 2008 Average Monthly Benefit | \$738 | \$907 | \$ 1,343 | \$ 1,761 | \$ 2,590 | \$ 4,104 | \$ 4,874 | \$ 2,553 |
| Final Average Salary | \$ 2,918 | \$ 3,271 | \$ 3,844 | \$4,251 | \$ 4,497 | \$ 5,137 | \$ 5,611 | \$ 4,396 |
| Number of Active Retirees | 214 | 556 | 649 | 835 | 688 | 1,122 | 425 | 4,489 |
| 2009 Average Monthly Benefit | \$743 | \$933 | \$ 1,286 | \$ 1,830 | \$ 2,584 | \$ 3,996 | \$ 5,035 | \$ 2,574 |
| Final Average Salary | \$ 3,359 | \$ 3,450 | \$ 3,819 | \$ 4,369 | \$4,733 | \$ 5,243 | \$ 5,723 | \$ 4,535 |
| Number of Active Retirees | 218 | 577 | 627 | 763 | 700 | 1,019 | 514 | 4,418 |
| 2010 Average Monthly Benefit | \$659 | \$ 989 | \$ 1,245 | \$ 1,829 | \$ 2,525 | \$ 3,955 | \$ 4,970 | \$ 2,535 |
| Final Average Salary | \$ 3,319 | \$ 3,669 | \$ 3,888 | \$ 4,482 | \$ 4,985 | \$ 5,393 | \$ 5,772 | \$ 4,677 |
| Number of Active Retirees | 237 | 635 | 700 | 916 | 885 | 1,148 | 557 | 5,078 |
| 2011 Average Monthly Benefit | \$631 | \$945 | \$ 1,308 | \$ 1,770 | \$ 2,489 | \$ 3,797 | \$ 5,188 | \$ 2,500 |
| Final Average Salary | \$ 3,344 | \$ 3,677 | \$ 4,079 | \$ 4,608 | \$ 5,152 | \$ 5,712 | \$ 6,139 | \$ 4,858 |
| Number of Active Retirees | 292 | 778 | 959 | 1,084 | 1,131 | 1,246 | 776 | 6,266 |
| 2012 Average Monthly Benefit | \$ 616 | \$963 | \$ 1,342 | \$ 1,742 | \$ 2,418 | \$ 3,636 | \$ 5,000 | \$ 2,414 |
| Final Average Salary | \$ 3,415 | \$ 3,798 | \$ 4,170 | \$ 4,537 | \$ 5,151 | \$ 5,650 | \$ 6,147 | \$ 4,850 |
| Number of Active Retirees | 327 | 897 | 1,045 | 1,062 | 1,244 | 1,210 | 867 | 6,652 |
| 2013 Average Monthly Benefit | \$ 676 | \$ 996 | \$ 1,377 | \$ 1,811 | \$ 2,414 | \$ 3,644 | \$ 5,158 | \$ 2,427 |
| Final Average Salary | \$ 3,463 | \$ 3,762 | \$ 4,243 | \$ 4,728 | \$ 5,425 | \$ 5,970 | \$ 6,150 | \$ 4,972 |
| Number of Active Retirees | 381 | 967 | 1,123 | 1,120 | 1,348 | 1,150 | 929 | 7,018 |
| 2014 Average Monthly Benefit | \$722 | \$ 1,003 | \$ 1,320 | \$ 1,694 | \$ 2,350 | \$ 3,403 | \$ 4,943 | \$ 2,308 |
| Final Average Salary | \$ 3,554 | \$ 3,608 | \$ 4,176 | \$ 4,728 | \$ 5,412 | \$ 5,785 | \$ 6,176 | \$ 4,914 |
| Number of Active Retirees | 398 | 1,039 | 1,153 | 1,235 | 1,454 | 1,237 | 936 | 7,452 |
| 2015 Average Monthly Benefit | \$ 623 | \$ 787 | \$ 1,202 | \$ 1,670 | \$ 2,230 | \$ 3,293 | \$ 4,906 | \$ 2,149 |
| Final Average Salary | \$ 3,446 | \$ 3,705 | \$4,343 | \$ 4,920 | \$ 5,399 | \$ 6,078 | \$ 6,702 | \$ 5,128 |
| Number of Active Retirees | 300 | 807 | 979 | 1,054 | 1,109 | 1,047 | 616 | 5,912 |

Schedule of Benefit Recipients by Benefit Type
For the Year Ended June 30, 2015

| Monthly Benefit <br> Amount | Number <br> of <br> 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 | 18,728 | 14,917 | 111 | 163 | 3,101 | 436 | 2,008 | 5,262 | 4,438 | 1,124 | 790 | 2,724 | 1,916 | 466 |
| 501-1000 | 19,923 | 16,314 | 114 | 664 | 2,224 | 607 | 2,450 | 6,492 | 5,741 | 1,933 | 934 | 1,117 | 983 | 273 |
| 1001-1500 | 16,639 | 13,833 | 88 | 702 | 1,546 | 470 | 1,806 | 5,169 | 5,325 | 1,816 | 741 | 778 | 784 | 220 |
| 1501-2000 | 13,719 | 11,531 | 78 | 622 | 1,111 | 377 | 1,532 | 3,972 | 4,606 | 1,573 | 546 | 614 | 689 | 187 |
| 2001-2500 | 11,749 | 10,147 | 81 | 474 | 795 | 252 | 1,193 | 3,274 | 3,981 | 1,407 | 460 | 539 | 752 | 143 |
| 2501-3000 | 9,772 | 8,595 | 54 | 362 | 571 | 190 | 1,021 | 2,686 | 3,425 | 1,245 | 343 | 415 | 512 | 125 |
| 3001-3500 | 8,391 | 7,589 | 49 | 206 | 450 | 97 | 843 | 2,303 | 3,089 | 1,199 | 308 | 233 | 335 | 81 |
| 3501-4000 | 7,352 | 6,791 | 36 | 171 | 309 | 45 | 707 | 1,942 | 3,034 | 1,067 | 258 | 129 | 161 | 54 |
| 4001-4500 | 6,471 | 6,095 | 30 | 89 | 227 | 30 | 510 | 1,694 | 2,770 | 1,024 | 251 | 77 | 105 | 40 |
| 4501-5000 | 5,610 | 5,341 | 13 | 51 | 190 | 15 | 442 | 1,398 | 2,554 | 907 | 184 | 33 | 71 | 21 |
| 5001-5500 | 4,253 | 4,044 | 10 | 35 | 151 | 13 | 327 | 1,125 | 1,934 | 675 | 128 | 17 | 39 | 8 |
| 5501-6000 | 3,060 | 2,928 | 12 | 26 | 90 | 4 | 210 | 757 | 1,413 | 547 | 90 | 16 | 22 | 5 |
| $6000+$ | 6,839 | 6,523 | 12 | 37 | 259 | 8 | 371 | 1,360 | 3,462 | 1,347 | 196 | 26 | 62 | 15 |
| Totals | 132,506 | 114,648 | 688 | 3,602 | 11,024 | 2,544 | 13,420 | 37,434 | 45,772 | 15,864 | 5,229 | 6,718 | 6,431 | 1,638 |
| *Type of Retirement |  |  |  |  |  |  |  | ** Annuity and Lump-Sum Options |  |  |  |  |  |  |
| 1 - Normal |  |  |  |  |  |  |  | 1 - No benefit for beneficiary. |  |  |  |  |  |  |
| 2 - Duty Disability |  |  |  |  |  |  |  | 2 - Beneficiary receives same monthly benefit for life. |  |  |  |  |  |  |
| 3 - Non-Duty Disability |  |  |  |  |  |  |  | 3 - Beneficiary receives half the monthly benefit for life. |  |  |  |  |  |  |
| 4 - Survivor Payment |  |  |  |  |  |  |  | 4-15-year certain. |  |  |  |  |  |  |
| 5 - Alternate Payee |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Schedule of Retirement System Membership at December 31:

|  | $\mathbf{1 9 8 5}$ | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 5}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 1 0}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| State Agencies | 37,824 | 46,187 | 45,068 | 42,434 | 38,076 | 48,018 |
| School Districts | 47,590 | 48,144 | 55,734 | 63,133 | 56,756 | 79,798 |
| Political Subdivisions | 26,238 | 33,177 | 40,635 | 53,291 | 50,085 | 65,332 |
| Inactive Members | 15,920 | 23,225 | 32,033 | 44,830 | 47,289 | 40,481 |
| Total Non-Retired | 127,572 | 150,733 | 173,470 | 203,688 | 192,206 | 233,629 |

Retired Members and Beneficiaries Total Membership

Administrative Expense ${ }^{1,2}$
Pension Roll (one month)

| 46,181 | 55,540 | 64,796 | 82,355 | 101,213 | 110,573 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 173,753 | 206,273 | 238,266 | 286,043 | 293,419 | 344,202 |
| \$ 2,905,072 | \$ 8,901,091 | \$ 13,500,677 | \$ 24,358,550 | \$ 40,056,600 | \$ 38,029,071 |
| \$ 18,083,614 | \$ 33,175,888 | \$ 58,457,531 | \$ 122,467,087 | \$ 202,633,214 | \$ 265,490,496 |

Schedule of Retirement System Membership at June 30:

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State Agencies | 44,377 | 46,105 | 46,739 | 45,953 | 45,019 | 45,774 | 47,620 |
| School Districts | 70,946 | 72,656 | 75,915 | 67,172 | 63,297 | 64,824 | 66,434 |
| Political Subdivisions | 55,745 | 57,989 | 60,695 | 56,656 | 54,943 | 54,376 | 54,536 |
| Inactive Members | 43,397 | 37,624 | 41,832 | 42,286 | 44,819 | 43,646 | 44,786 |
| Total Non-Retired | 214,465 | 214,374 | 225,181 | 212,067 | 208,078 | 208,620 | 213,376 |
| Retired Members and Beneficiaries | 107,936 | 110,642 | 114,252 | 119,346 | 123,827 | 129,138 | 132,506 |
| Total Membership | 322,401 | 325,016 | 339,433 | 331,413 | 331,905 | 337,758 | 345,882 |
| Administrative Expense ${ }^{1,2}$ | \$38,648,977 | \$40,351,845 | \$ 38,594,620 | \$42,254,365 | \$42,792,995 | \$40,395,370 | \$45,791,942 |
| Pension Roll (one month) | \$227,379,725 | \$236,323,468 | \$ 270,111,478 | \$284,236,712 | \$299,997,147 | \$303,834,899 | \$317,090,746 |

## Schedule of Principal Participating Employers <br> Current Fiscal Year and Nine Years Ago

|  | 2015 |  |  | 2006 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Current Employees | Rank | Percent of Total System | Number of Current Employees | Rank | Percent of Total System |
| State of Oregon | 47,428 | 1 | 28.13\% | 37,973 | 1 | 24.23\% |
| Portland Public Schools | 5,686 | 2 | 3.37 | 4,984 | 3 | 3.18 |
| Salem-Keizer Public Schools | 4,735 | 3 | 2.81 | 3,948 | 5 | 2.52 |
| Multnomah County | 4,707 | 4 | 2.79 | 4,047 | 2 | 3.18 |
| City of Portland | 4,532 | 5 | 2.69 | 3,509 | 4 | 2.58 |
| Oregon Health \& Science University | 4,221 | 6 | 2.50 | 4,988 | 6 | 2.24 |
| Beaverton School District | 4,116 | 7 | 2.44 | 3,488 | 7 | 2.23 |
| Portland Community College | 2,438 | 8 | 1.45 | 2,849 | 8 | 1.82 |
| Hillsboro School District IJ | 2,342 | 9 | 1.39 | 1,974 | 9 | 1.26 |
| Clackamas County | 1,945 | 10 | 1.15 | -- |  |  |
| Eugene School District 4J | -- |  | -- | 1,864 | 10 | 1.19 |
| All Others* | 86,440 |  | 51.28 | 87,074 |  | 55.57 |
| Total | 168,590 |  | 100.00\% | 156,698 |  | 100.00\% |
| * "All Others" consisted of: |  |  |  |  |  |  |
| Counties | 10,615 |  | 6.30\% | 12,381 |  | 7.90\% |
| Municipalities | 12,490 |  | 7.41 | 11,410 |  | 7.28 |
| School Districts | 49,555 |  | 29.39 | 49,710 |  | 31.73 |
| Community Colleges | 5,728 |  | 3.40 | 6,635 |  | 4.23 |
| Other Political Subdivisions | 8,052 |  | 4.78 | 6,938 |  | 4.43 |
| Total All Others | 86,440 |  | 51.28\% | 87,074 |  | 55.57\% |

Information is not available to display principal participating employers' data prior to 2006.

## Oregon Public Employees Retirement System

## Schedule of Participating Employers (910)

State (112)
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
Chancellor's Office
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 Community Colleges and Work Force Development
Department of Consumer and Business Services
Department of Corrections
Department of Education
Department of Education Coordinating Commission
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
District Attorneys Department
Eastern Oregon University
Employment Department
Employment Relations Board
Forestry Department
Geology and Mineral Industries
Health Related Licensing Boards
Judges PERS
Judicial Department
Land Use Board of Appeals
Landscape Contractors Board
Legislative Administration Committee
Legislative Assembly
Legislative Committees
Legislative Fiscal Office
Long Term Care Ombudsman
Military Department
Office of the Governor
Office of Legislative Counsel
Office of the State Treasurer Oregon Advocacy Commission Office
Oregon Board of Licensed Professional Counselors and Therapists

Oregon Beef Council
Oregon Board of Dentistry
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 Health Insurance Exchange Corporation
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 Student Assistance 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

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Water Resources Department
Western Oregon University

## Political Subdivisions (485)

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

Clackamas County Fire District 1
Clackamas County Vector Control District
Clackamas River Water Providers
Clackamas River Water
Clatskanie, City of
Clatskanie Library District
Clatskanie People's Utility District
Clatskanie RFPD
Clatsop County
Clean Water Services
Cloverdale RFPD
Coburg, City of
Coburg RFPD
Colton RFPD 70
Columbia City, City of
Columbia County
Columbia County 911 Communications District
Columbia Drainage Vector Control District
Columbia River Fire and Rescue
Columbia River PUD
Community Services Consortium
Condon, City of
Coos Bay, City of
Coos County
Coos County Airport District
Coquille, City of
Corbett Water District
Cornelius, City of
Corvallis, City of
Cottage Grove, City of
Crescent RFPD
Creswell, City of
Crook County
Crook County RFPD 1
Crooked River Ranch RFPD
Crystal Springs Water District
Culver, City of
Curry County
Curry Public Library District
Dallas, City of
Dayton, City of
Depoe Bay, City of
Depoe Bay RFPD
Deschutes County
Deschutes County RFPD 2
Deschutes Public Library District
Deschutes Valley Water District
Dexter RFPD
Douglas County
Douglas County RFPD 2
Douglas County Soil and Water Conservation District
Drain, City of
Dufur, City of
Dundee, City of
Dunes City, City of
Durham, City of
Eagle Point, City of
East Fork Irrigation District
East Umatilla County RFPD
Echo, City of
Elgin, City of
Elkton, City of
Enterprise, City of

Estacada, City of
Estacada Cemetery Maintenance District
Estacada RFD 69
Eugene, City of
Eugene Water and Electric Board
Fairview, City of
Fairview Water District
Falls City, City of
Farmers Irrigation District
Fern Ridge Community Library
Florence, City of
Fossil, City of
Garibaldi, City of
Gaston, City of
Gaston RFPD
Gearhart, City of
Gervais, City of
Gilliam County
Gladstone, City of
Glide RFPD
Gold Beach, City of
Gold Hill, City of
Goshen RFPD
Grant County
Grants Pass, City of
Grants Pass Irrigation District
Greater St. Helens Parks and Recreation District
Green Sanitary District
Gresham, City of
Halsey, City of
Halsey-Shedd RFPD
Happy Valley, City of
Harbor Water PUD
Harney County
Harney Health District
Harrisburg, City of
Harrisburg Fire and Rescue
Helix, City of
Heppner, City of
Hermiston, City of
Hermiston RFPD
High Desert Park and Recreation District
Hillsboro, City of
Hines, City of
Hood River, City of
Hood River County
Hoodland RFD 74
Horsefly Irrigation District
Housing Authority of Clackamas County
Housing Authority of Jackson County
Housing Authority of Portland
Hubbard, City of
Huntington, City of
Ice Fountain Water District
Illinois Valley RFPD
Imbler RFPD
Independence, City of
Irrigon, City of
Jackson County
Jackson County Fire District 3
Jackson County Fire District 4
Jackson County Fire District 5
Jackson County Fire District 6

Oregon Public Employees Retirement System
Jackson County Vector Control District
Jacksonville, City of
Jefferson, City of
Jefferson County
Jefferson County EMS District
Jefferson County Library District
Jefferson County RFPD 1
Jefferson County SWCD
Jefferson RFPD
Job Council
John Day, City of
Jordan Valley, City of
Joseph, City of
Josephine County
Junction City, City of
Junction City RFPD
Keizer, City of
Keizer RFPD
Keno RFPD
King City, City of
Klamath County
Klamath County Emergency
Communications District
Klamath County Fire District 1
Klamath Falls, City of
Klamath Housing Authority
Klamath Vector Control District
Knappa Svensen Burnside RFPD
La Grande, City of
La Grande Fire and Rescue District
La Pine RFPD
Lafayette, City of
Lake Chinook Fire and Rescue District
Lake County
Lake County 4-H and Extension
Service District
Lake County Library District
Lake Oswego, City of
Lakeside, City of
Lakeside Water District
Lakeview, Town of
Lane Council of Governments
Lane County
Lane County Fire Authority
League of Oregon Cities
Lebanon Aquatic District
Lebanon, City of
Lebanon RFPD
Lincoln City, City of
Lincoln County
Linn County
Linn-Benton Housing Authority
Local Government Personnel Institute
Lowell, City of
Lowell RFPD
Lyons, City of
Lyons RFPD
Madras, City of
Malheur County
Malin, City of
Manzanita, City of
Mapleton Water District
Marion County
Marion County Fire District 1
Marion County Housing Authority
Maupin, City of
McKenzie RFPD

## Oregon Public Employees Retirement System

McMinnville, City of
McMinnville Water and Light Department
Medford, City of
Medford Irrigation District
Medford Water Commission
Merrill, City of
Metolius, City of
METRO
Metropolitan Area Communication Commission
Mid-Columbia Center for Living
Mid-Columbia Fire and Rescue
Mill City, City of
Mill City RFPD
Millersburg, City of
Millington RFPD
Milton-Freewater, City of
Milwaukie, City of
Mist-Birkenfeld RFPD
Mohawk Valley RFD
Molalla, City of
Molalla RFPD 73
Monmouth, City of
Monroe, City of
Monroe RFPD
Moro, City of
Mosier Fire District
Mt. Angel, City of
Mt. Angel Fire District
Mt. Vernon, City of
Mulino Water District 23
Multnomah County
Multnomah County Drainage District 1
Multnomah County RFPD 14
Myrtle Creek, City of
Myrtle Point, City of
Nehalem Bay Fire and Rescue
Nehalem Bay Health District
Nehalem Bay Wastewater Agency
Nesika Beach - Ophir Water District
Neskowin Regional Sanitary Authority
Neskowin Regional Water District
Nestucca RFPD
Netarts-Oceanside RFPD
Netarts-Oceanside Sanitary District
Netarts Water District
Newberg, City of
Newport, City of
North Bend City Housing Authority
North Bend, City of
North Central Public Health District
North Clackamas County Water Commission
North Douglas County Fire and EMS
North Lincoln Fire \& Rescue District 1
North Marion County Communications
North Morrow Vector Control District
North Plains, City of
North Powder, City of
North Wasco County Parks \& Recreation District
Northeast Oregon Housing Authority
Northern Oregon Corrections
Northwest Senior and Disability Services
Nyssa, City of

Nyssa Road Assessment District 2
Oak Lodge Sanitary District
Oak Lodge Water District
Oakland, City of
Oakridge, City of
Ochoco Irrigation District
Odell Sanitary District
Ontario, City of
Oregon Cascades West COG
Oregon City, City of
Oregon Community College
Association
Oregon Consortium, The
Oregon Health \& Science University
Oregon Municipal Electric Utilities
Association
Oregon School Boards Association
Oregon Trail Library District
Owyhee Irrigation District
Parkdale RFPD
Pendleton, City of
Philomath, City of
Philomath Fire and Rescue
Phoenix, City of
Pilot Rock, City of
Pleasant Hill RFPD
Polk County
Polk County Fire District 1
Polk Soil and Water Conservation District
Port of Astoria
Port of Cascade Locks
Port of Coos Bay, International
Port of Garibaldi
Port of Hood River
Port of Newport
Port of Portland
Port of St. Helens
Port of The Dalles
Port of Tillamook Bay
Port of Umatilla
Port Orford, City of
Port Orford Public Library
Portland, City of
Portland Development Commission
Powers, City of
Prairie City, City of
Prineville, City of
Rainbow Water District
Rainier, City of
Rainier Cemetery District
Redmond Area Park and Recreation District
Redmond Fire and Rescue
Redmond, City of
Reedsport, City of
Riddle, City of
Rockaway Beach, City of
Rockwood Water PUD
Rogue River, City of
Rogue River RFPD
Rogue River Valley Irrigation District
Roseburg, City of
Roseburg Urban Sanitary Authority
Rural Road Assessment District 3
Salem, City of

Salem Housing Authority
Salmon Harbor and Douglas County
Sandy, City of
Sandy RFPD 72
Santa Clara RFPD
Scappoose, City of
Scappoose Public Library District
Scappoose RFPD
Scio RFPD
Seal Rock RFPD
Seal Rock Water District
Shady Cove, City of
Sheridan, City of
Sheridan Fire District
Sherman County
Sherwood, City of
Siletz Rural Fire Protection District
Silver Falls Library District
Silverton, City of
Silverton RFPD 2
Sisters and Camp Sherman RFPD
Sisters, City of
Siuslaw Public Library District
Siuslaw RFPD 1
South Fork Water Board
South Lane County Fire and Rescue
South Suburban Sanitary District
Southwest Polk County RFPD
Southwest Lincoln County Water District
Springfield, City of
Springfield Utility Board
St. Helens, City of
Stanfield, City of
Stanfield Fire District 7-402
Stayton, City of
Stayton RFPD
Sublimity RFPD
Suburban East Salem Water District
Sunrise Water Authority
Sunriver Service District
Sutherlin, City of
Sutherlin Water Control District
Sweet Home, City of
Sweet Home Cemetery Maintenance District
Sweet Home Fire and Ambulance District
Talent, City of
Talent Irrigation District
Tangent RFPD
Tigard, City of
Tillamook, City of
Tillamook County Emergency Communications District
Tillamook County Soil and Water Conservation District
Tillamook Fire District
Tillamook People's Utility District
Toledo, City of
Tri-City Water and Sanitary Authority
Tri-County Cooperative Weed Management Area
Troutdale, City of
Tualatin, City of
Tualatin Valley Fire and Rescue

Tualatin Valley Irrigation District Tualatin Valley Water District
Turner, City of
Umatilla, City of
Umatilla County
Umatilla County Soil and Water District
Umatilla County Special Library District
Umatilla-Morrow Radio and Data District
Umatilla RFPD 7-405
Vale, City of
Valley View Cemetery Maintenance District
Veneta, City of
Vernonia, City of
Vernonia RFPD
Waldport, City of
Wallowa, City of
Wallowa County
Warrenton, City of
Wasco County
Wasco County Soil and Water Conservation District
Washington County
Washington County Consolidated Communications Agency
Washington County Fire District 2
West Extension Irrigation District
West Linn, City of
West Multnomah Soil and Water Conservation District
West Side Fire District
West Slope Water District
West Valley Fire District
West Valley Housing Authority
Western Lane Ambulance District
Westfir, City of
Weston, City of
Weston Cemetery District
Wheeler, City of
Wickiup Water District
Willamina, City of
Wilsonville, City of
Winchester Bay Sanitary District
Winston, City of
Winston-Dillard Fire District
Winston-Dillard Water District
Wood Village, City of
Woodburn, City of
Woodburn Fire District
Wy'East Fire District
Yachats, City of
Yachats RFPD
Yamhill, City of
Yamhill Communications Agency
Yamhill County
Yamhill Fire Protection District
Yoncolla, City of
Community Colleges (17)
Blue Mountain Community College Central Oregon Community College Chemeketa Community College Clackamas Community College
Clatsop Community College

Columbia Gorge Community College
Klamath Community College
Lane Community College
Linn-Benton Community College
Mt. Hood Community College
Oregon Coast Community College
Portland Community College
Rogue Community College
Southwestern Oregon Community College
Tillamook Bay Community College
Treasure Valley Community College
Umpqua Community College

## School Districts (296)

Alliance Charter Academy
Arco Iris Spanish Immersion Charter School
Armadillo Technical Institute
Baker CSD 5J
Baker CSD 16J
Baker CSD 30 J
Baker CSD 61
Baker Web Academy
Ballston Community School
Beaverton School District 48J
Bend International School
Bennett Pearson Academy Charter School
Benton CSD 1J
Benton CSD 7J
Benton CSD 17J
Benton CSD 509J
Cascade Heights Public Charter School
Center for Advanced Learning
Central Curry School District 1
City View Charter School
Clackamas Charter Alliance 1
Clackamas Charter Alliance 2
Clackamas County ESD
Clackamas CSD 3
Clackamas CSD 7J
Clackamas CSD 12
Clackamas CSD 35
Clackamas CSD 46
Clackamas CSD 53
Clackamas CSD 62
Clackamas CSD 86
Clackamas CSD 108
Clackamas CSD 115
Clatskanie School District 6J
Clatsop CSD 1C
Clatsop CSD 4
Clatsop CSD 8
Clatsop CSD 10
Clatsop CSD 30
Coburg Community Charter School
Columbia CSD 13
Columbia CSD 47 J
Columbia CSD 502
Columbia Gorge Education Service District
Condon Admin. School District 25J
Coos CSD 8
Coos CSD 9
Coos CSD 13

Oregon Public Employees Retirement System
Coos CSD 31
Coos CSD 41
Coos CSD 54
Corbett Charter School
Crater Lake Charter Academy
Crook CSD
Curry CSD 2CJ
Curry CSD 17C
Dayton School District 8
Deschutes CSD 1
Deschutes CSD 2J
Deschutes CSD 6
Douglas County ESD
Douglas CSD 1
Douglas CSD 4
Douglas CSD 12
Douglas CSD 15
Douglas CSD 19
Douglas CSD 21
Douglas CSD 22
Douglas CSD 32
Douglas CSD 34
Douglas CSD 70
Douglas CSD 77
Douglas CSD 105
Douglas CSD 116
Douglas CSD 130
EagleRidge High School
Eddyville Charter School
Estacada Web and Early College Academy 1
Forest Grove Community School
Fossil School District 21J
Four Rivers Community School
Gilliam CSD 3
Grant School District 3
Grant County ESD
Grant CSD 4
Grant CSD 8
Grant CSD 16J
Grant CSD 17
Greater Albany Public Schools 8J
Gresham Barlow Web Academy Public Charter School
Harney ESD Region 17
Harney CSD 3
Harney CSD 4
Harney CSD 5
Harney CSD 7
Harney CSD 10
Harney CSD 16
Harney CSD 28
Harney CSD UH1J
Harrisburg School District 7
High Desert Education Service District
Hillsboro School District 1J
Home Scholars Academy of Oakridge and Westfir
Hood River CSD
Hope Chinese Charter School
Howard Street Charter School, Inc.
Inavale Community Partners
Insight School Of Oregon Charter Option
Ione School District
Jackson CSD 4
Jackson CSD 5

## Oregon Public Employees Retirement System

Jackson CSD 6
Jackson CSD 9
Jackson CSD 35
Jackson CSD 59
Jackson CSD 91
Jackson CSD 94
Jackson CSD 549C
Jefferson County ESD
Jefferson CSD 4
Jefferson CSD 8
Jefferson CSD 41
Jefferson CSD 509J
Jordan Valley School District 3
Josephine County UJ School District
Josephine CSD 7
Kings Valley Charter School
Kairos PDX
Klamath CSD CU
Klamath Falls City Schools
Knova Learning Oregon
Lake County ESD
Lake CSD 7
Lake CSD 11C
Lake CSD 14
Lake CSD 18
Lake CSD 21
Lane County ESD
Lane CSD 1
Lane CSD 4J
Lane CSD 19
Lane CSD 28J
Lane CSD 32
Lane CSD 40
Lane CSD 45J3
Lane CSD 52
Lane CSD 66
Lane CSD 68
Lane CSD 69
Lane CSD 71
Lane CSD 76
Lane CSD 79J
Lane CSD 90
Lane CSD 97J
LEP High
Le Monde Immersion
Lewis and Clark Montessori Charter School
Lincoln CSD
Linn CSD 9
Linn CSD 55
Linn CSD 95C
Linn CSD 129J
Linn CSD 552C
Linn Benton Lincoln ESD
Logos Public Charter School
Lourdes Charter School
Luckiamute Valley Charter School
Madrone Trail Public Charter School
Malheur ESD Region 14
Malheur CSD 8C
Malheur CSD 12
Malheur CSD 26C
Malheur CSD 29
Malheur CSD 61
Malheur CSD 66
Malheur CSD 81
Malheur CSD 84

Marion CSD 1
Marion CSD 4J
Marion CSD 5
Marion CSD 14CJ
Marion CSD 15
Marion CSD 24J
Marion CSD 45
Marion CSD 91
Marion CSD 103C
Mastery Learning Institute
Molalla River Academy
Morrow CSD
Mosier Community School
Mosier Middle School
Mountain View Academy
Multisensory Institute Teaching Children
Multisensory Learning Academy
Multnomah County ESD
Multnomah CSD 1
Multnomah CSD 3
Multnomah CSD 7
Multnomah CSD 10
Multnomah CSD 28-302 JT
Multnomah CSD 39
Multnomah CSD 51JT
Multnomah CSD R-40
Nixyaawii Community School
North Central ESD
North Santiam School District 29J
North Powder School District
North Wasco CSD 21
Northwest Regional ESD
Opal School
Oregon Building Congress Academy for Architecture, Construction and Engineering
Oregon Connections Academy
Oregon Virtual Academy
Oregon Virtual Education East
Oregon Virtual Education West
Personalized Learning, Inc.
Phoenix School, The
Polk CSD 2
Polk CSD 13J
Polk CSD 21
Polk CSD 57
Portland Village School
Powell Butte Community Charter School
Renaissance Public Academy
Ridgeline Montessori Public Charter School
Rimrock Academy
River's Edge Academy Charter School
Sage Community School
Sand Ridge Charter School
Sauvie Island Academy
Scappoose School District 1J
Self-Enhancement Inc.
Sheridan AllPrep Academy
Sheridan Japanese School Foundation
Sherman CSD
Sherwood Charter School
Siletz Valley Early College Academy
Siletz Valley School
Sisters Web and Early College

Academy \#3
South Coast ESD Region 7
South Columbia Family School
South Harney School District 33
South Wasco County School District 1
Southwest Charter School
Southern Oregon ESD
Springfield Academy of Arts \& Academics
Springwater Environmental Sciences School
Sunny Wolf Charter School
Sweet Home Charter School
The Emerson School
The Ivy School
The Lighthouse School
The Village School
Three Rivers Charter School
Tillamook CSD 9
Tillamook CSD 56
Tillamook CSD 101
Trillium Charter School
Umatilla County Administrative School District 1R
Umatilla Morrow ESD
Umatilla CSD 2R
Umatilla CSD 5
Umatilla CSD 6R
Umatilla CSD 7
Umatilla CSD 8R
Umatilla CSD 16R
Umatilla CSD 29RJ
Umatilla CSD 61R
Umatilla CSD 80R
Union CSD 1
Union CSD 5
Union CSD 11
Union CSD 15
Union CSD 23
Wallowa County Region 18 ESD
Wallowa CSD 6
Wallowa CSD 12
Wallowa CSD 21
Wallowa CSD 54
Wasco CSD 29
Washington CSD 13
Washington CSD 15
Washington CSD 23J
Washington CSD 88J
Washington CSD 511JT
West Lane Technical Learning Center
Wheeler CSD 1
Wheeler CSD 55U
Willamette ESD
Woodland Charter School
Yamhill CSD 1
Yamhill CSD 4J
Yamhill CSD 29JT
Yamhill CSD 30-44-63J
Yamhill CSD 40
Yamhill CSD 48J

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Cover photo
Fairy Falls, Oregon
Scott Kyle, photographer


[^0]:    1 10-year trend information will be disclosed prospectively.
    2 GASB 68 defines covered-employee payroll as the total payroll of employees that are provided pensions through the pension plan. Covered-employee payroll in this schedule is based on subject salary provided by participating employers.
    ${ }^{3}$ See Table 27 for Actuarial Methods and Assumptions.

    ## Notes to Schedule:

    Benefit Changes
    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 benefits projected to be paid compared to those developed in the prior actuarial valuation, and consequently increased plan liabilities.

[^1]:    ${ }^{1}$ All performance figures cited are based on time-weighted return calculations.

[^2]:    *Investment Results are based on OIC asset classes as determined by each manager's primary investment type, not the financial statement classification of

[^3]:    * 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.

[^4]:    This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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[^6]:    This work product was prepared solely for Oregon Public Employees Retirement System for the purposes stated herein, and may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work. Milliman recommends that third parties be aided by their own actuary or other qualified professional when reviewing the Milliman work product.

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[^8]:    ${ }^{1}$ 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.

[^9]:    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 .

[^10]:    1 The $12 / 31 / 2012$ valuation reflects a change in cost method to Entry Age Normal.
    2 Discrepencies contained in this table are the result of rounding differences.

[^11]:    1 Balances restated for fiscal years 2012 due prior period adjustments.

[^12]:    ${ }^{1}$ Balances restated for fiscal year 2012 due to prior period adjustments.

[^13]:    ${ }^{1}$ Balances restated for fiscal year 2012 due to a prior period adjustment.

[^14]:    ${ }^{1}$ Calendar year-end information is provided because earnings are distributed as of December 31.
    ${ }^{2}$ Amounts represent actual employer contributions net of employer side account amortization.

[^15]:    ${ }^{1}$ Calendar year-end information is provided because earnings are distributed as of December 31.
    ${ }^{2}$ Balances are restated for fiscal years 2005 to 2009 due to prior period adjustments.

[^16]:    ${ }^{1}$ Calendar year-end information is provided because earnings are distributed as of December 31.
    ${ }^{2}$ Balances are restated for fiscal years 2005 to 2009 due to prior period adjustments.
    ${ }^{3}$ Balances restated for fiscal years 2013 to correct amounts.

[^17]:    1 Calendar year-end information is provided because earnings are distributed as of December 31

[^18]:    1 Calendar year-end information is provided because earnings are distributed as of December 31.

[^19]:    ${ }^{1}$ Effective years of retirement and final average salary are not available for OPEB.

