Annual Comprehensive Financial Report

For the Fiscal Year Ended June 30, 2021

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Oregon Public Employees Retirement System

An Agency of the State of Oregon

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Front Cover Photo: Crater Lake

Taken by: Radford Bean

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Annual Comprehensive Financial Report

For the Fiscal Year Ended June 30, 2021

Oregon Public Employees Retirement System

An Agency of the State of Oregon

Kevin Olineck
Director

Richard Horsford
Chief Financial Officer

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INTRODUCTORY SECTION

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Oregon
Kate Brown, Governor

Public Employees Retirement System
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December 10, 2021

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

We are pleased to submit the Annual Comprehensive Financial Report (ACFR) of the Oregon Public Employees Retirement System (PERS, System or Agency) for the fiscal year ended June 30, 2021. This report includes all funds over which the Public Employees Retirement Board (Board) exercises authority. These funds were established to provide retirement, death, and disability benefits and other postemployment benefits (OPEB) to members; administer retiree health insurance programs; and oversee the state-sponsored deferred compensation program. As of June 30, 2021, PERS provides services to 900 employers and more than 384,000 active, inactive, and retired members and beneficiaries.

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

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

Management's Discussion and Analysis

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

Financial Information

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

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

Factors Affecting Economic Condition

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

Funding

The System is funded through contributions and investment earnings. For judges, the contribution is set at 7.0 percent of covered salary. Employer contributions are established by actuarial valuations conducted biennially in odd-numbered calendar years. The System's funding objective is to meet long-term benefit promises through contributions that fund benefits as they accrue. An adequate contribution level, when combined with investment earnings, will result in the full funding of benefits as they come due. If the level of funding is adequate, the ratio of assets accumulated to total liabilities will increase, and more income will be available for investment. Prudent investment of assets, and returns on those investments, may increase the funding base and allow for a more stable employer contribution rate. As of the December 31, 2020 actuarial valuation, the System has a funded ratio of 75.9 percent for the defined benefit pension plan it administers, including employer side accounts, and 70.6 percent funded ratio, excluding employer side accounts.

All members, with the exception of judges, contribute 6.0 percent of salary to the Individual Account Program (IAP), an individual account-based program under the PERS tax-qualified governmental plan for all PERS members, established in 2004. Beginning July 1, 2020, Senate Bill 1049 required a portion of most member contributions to their IAP accounts be redirected to their new Employee Pension Stability Account (EPSA) to help fund the cost of their future pension benefits. For OPSRP members, the redirected amount is 0.75 percent of their IAP contribution and for Tier One and Tier Two members, the redirected amount is 2.5 percent of their IAP contribution. In 2020, only members who earned more than $2,500 a month experienced the redirect; in 2021, the salary requirement was $2,535.

Investments

The Oregon Investment Council (OIC) has statutory authority (ORS 293.701) to establish policies for the investment and reinvestment of the System's funds. The System's long-term investment strategy is designed to capitalize on investment return while protecting principal. The OIC works to strategically allocate assets in the System's portfolio. The target investment portfolio mix at fair value as of June 30, 2021, was 32.50 percent public equity, 17.50 percent private equity, 20.00 percent debt securities, 12.50 percent real estate, 15.00 percent alternatives, and 2.50 percent risk parity. In addition to approved asset classes, target asset allocation ranges, and rebalancing policies, the OIC further safeguards the System's investment portfolio through use of an independent custodian, defined limits on delegated authority, and independent audits. The OIC uses external portfolio managers, employing both passive (indexed) and active investment strategies. The portfolio is broadly diversified among equities, debt securities, real estate, and private equities, with additional diversification achieved through domestic and international investing. System securities are held

by State Street Bank and Trust Company.

The System's Regular Investment Portfolio (Portfolio) experienced in fiscal year 2021 a rate of return of 25.5 percent. This compares with a rate of return of 0.52 percent for fiscal year 2020. The Portfolio's trailing 10-year return was 8.8 percent. Descriptions of OIC policies regarding diversification, performance objectives, fees, and asset allocation are found beginning on page 98.

Major Initiatives

Senate Bill 1049 (SB 1049)

SB 1049 was signed into law by the governor on June 11, 2019. The challenge for PERS has been to not only implement this bill, but also continue to provide our members and employers with uninterrupted service, while working through the intricacies of implementing SB 1049.

The Agency developed an overall implementation approach to tackle each element of SB 1049. This approach is to manage this as one, comprehensive program with the following five individual projects:

Project	Effective Date
Employer Programs	7/1/2019
Salary Limit	1/1/2020
Work After Retirement	1/1/2020
Member Redirect	7/1/2020
Member Choice	1/1/2021

As of June 30, 2021, PERS fully closed the Employer Programs and Salary Limit projects. The Member Choice project was closed in August 2021. Work continues on the Work After Retirement project with a completion date of February 2022 and the Member Redirect project with an expected completion date of April 2024. PERS also initiated a new project, Technical Debt, to address some technical debt issues that arose as a result of project implementations. PERS received funding for these projects for the 2021–2023 biennia.

Strategic Management System

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

The 2018–2023 PERS Strategic Plan was updated during the year to reflect six strategic priorities. Each priority has several areas of focus and specific, achievable goals and objectives. The six strategic priorities are:

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

For each of the strategic priorities, PERS is using existing strategic and operational planning functions to prioritize and allocate resources. Strategies are being implemented using a variety of methods. The methods include problem solving, project management, breakthrough initiatives, and integration into core business practices. Specific performance metrics have been identified for tracking.

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

More information on the 2018–2023 PERS Strategic Plan can be found on our website at: https://www.oregon.gov/pers/Documents/Strategic-Plan.pdf.

Information Security and Continuity Management Programs

The Agency has been working diligently on establishing a Continuity Management Program, which encompasses our Continuity of Operations Plan, Business Recovery, and Disaster Recovery Plans. Agency staff have made significant strides in establishing an industry standard program. That said, there is recognition that, while we now have the basics in place, there is still significant effort required to ensure that we continue to build out our Continuity Management Program.

Similar to Continuity Management, Information Security is one of the foundational initiatives the Agency needs to have in place. This ensures that the data and personal information we maintain are secure. Working collaboratively with the State Enterprise Security Office, staff made significant strides in building out our Information Security Program in fiscal year 2021.

Member and Employer Satisfaction Surveys

PERS' 2021 member satisfaction survey results show a decrease in satisfaction from 2020. The results were fairly similar to 2019 results, following the trend of lower satisfaction during years when the legislature is in regular session. This is notable as overall member response rates continue to oscillate year to year, including from nonretired members. Retiree satisfaction continues to hover just under 95 percent, rating PERS' overall quality of service as "excellent" or "good." Nonretired member satisfaction dropped from 78 percent in 2020 to 73 percent in 2021.

Employers reported a satisfaction rating of just over 85 percent in 2021, down from nearly 89 percent in 2020. 2021 results reflected a lower response rate, possibly because employers continue to focus on other reporting requirements during the continued COVID-19 pandemic.

Awards and Acknowledgements

Certificate of Achievement

The GFOA Certificate of Achievement for Excellence in Financial Reporting is applicable for the fiscal year ended June 30, 2020. 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 ACFR, with contents that conform to program standards. The ACFR must satisfy both generally accepted accounting principles and applicable legal requirements. A Certificate of Achievement is

valid for one year. The System has received a Certificate of Achievement for the last 30 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 2021 Public Pension Standards Award to PERS for its plan design and administration.

The PPCC is a coalition of three associations representing public pension funds covering the vast majority of public employees in the United States. The associations are: 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 19th year the PPCC has offered the award to public retirement systems and the 18th consecutive year PERS has applied for and received the award.

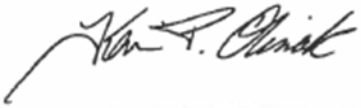
Acknowledgments

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

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

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

Respectfully submitted,



Kevin Olineck
Director

Richard Horsford
Chief Financial Officer

Public Employees Retirement Board

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

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

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

As of June 30, 2021, the three Board members representing business management, pension management, or investing are Sadhana Shenoy (Board Chair), Stephen Buckley, and Jardon Jaramillo. John Scanlan was appointed to represent public employees and retirees; Lawrence J. Furnstahl (Vice-Chair) was appointed to represent public employers. Terms for each member are staggered.

Sadhana Shenoy (Board Chair)

Sadhana Shenoy has spent more than the last five years in the Mobility-as-a-Service (MaaS) space. She was the Chief Financial Officer and Chief Operations Officer of Moovel, a transit technology company, and held this position as the company developed from start-up to acquisition and into growth. She started her career as a software engineer working with databases and children's software. She then moved to the nonprofit sector, working on boards within the environmental (Sierra Club), educational (Montessori School of Beaverton) and legal (CRAG Law Center) areas. Ms. Shenoy is a charter and board member of TiE Oregon (The Indus Entrepreneurs) and of TYE Oregon (TiE Youth Entrepreneurs) and enjoys angel investing in exciting new ideas and promoting youth entrepreneurship.

Ms. Shenoy holds Bachelor of Science degrees in accounting and business administration and a Master of Science degree in computer science. She is a Certified Public Accountant (CPA) in Oregon.

Lawrence J. Furnstahl (Vice-Chair)

Lawrence J. Furnstahl has three decades of experience in the strategic, financial, and operational management of complex organizations, including universities and academic health centers. Mr. Furnstahl has served as a chief financial officer for more than 25 years. He is now the Executive Vice President and Chief Financial Officer of Oregon Health & Science University (OHSU). OHSU is a $3.1 billion public corporation with nearly 3,000 faculty, 17,500 staff, and 5,600 students and trainees. OHSU participates in $486 million of research and is the state's only major academic health center. Prior to joining OHSU in January 2011, Mr. Furnstahl served as Chief Financial and Strategy Officer with the University of Chicago Medical Center and Biological Sciences Division. Over the years, he has also served as Vice President of Financial Planning for Science for University of Chicago; Senior Vice President and Chief Financial Officer for University of California, San Francisco, Stanford Health Care; Vice President and Chief Financial Officer for the University of Chicago; and Vice President and Treasurer of Patient Services for the University of Chicago Hospitals. Mr. Furnstahl is a member of the Visiting Committee to the Physical Sciences Division of the University of Chicago, and a board director and former Chair of the Hyde Park Art Center. He is a graduate of the College of the University of Chicago, with a degree in economics.

Stephen Buckley

Stephen Buckley was a partner at the Portland, Oregon law firm Brownstein Rask LLP prior to his retirement on June 30, 2019. For more than 30 years, Mr. Buckley served as legal counsel for Boards of Trustees of private sector health and welfare plans and defined benefit, defined contribution, and 401(k) pension plans in Washington, Oregon, and California. Mr. Buckley was a frequent speaker at employee benefit plan conferences sponsored by the International Foundation of Employee Benefit Plans. Mr. Buckley earned his Bachelor of Arts degree in political science from Colorado State University and his Juris Doctorate degree from Willamette University College of Law.

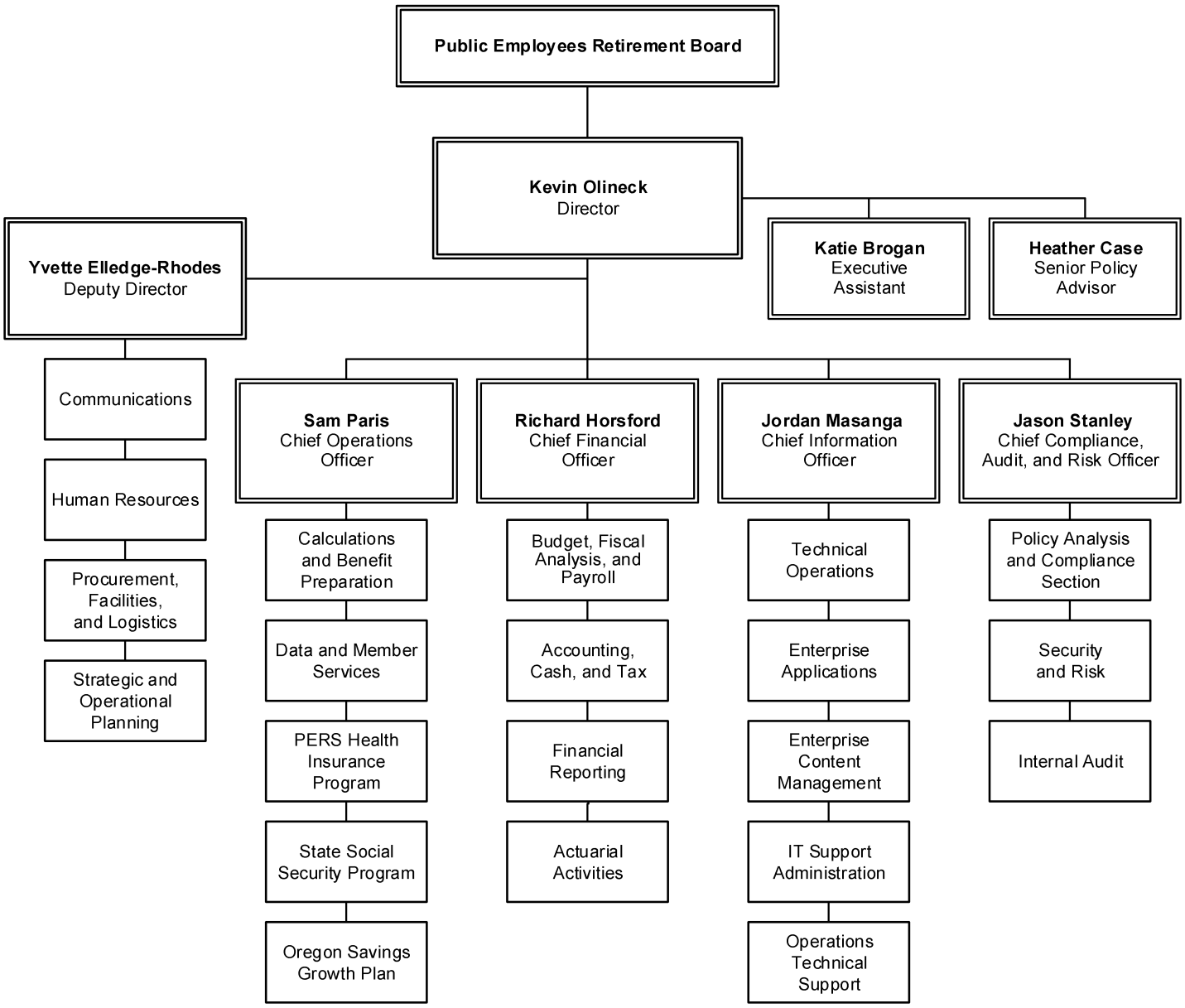
John Scanlan

John Scanlan was a teacher for 29 years and retired in 2021. He taught English language arts to students in grades 6 to 12 in three districts; was an adjunct professor at Eastern Oregon University (EOU); co-directed the Oregon Writing Project at EOU; and coordinated the Pendleton School District Outdoor School, the longest continuously operating outdoor school program east of the Cascades. Mr. Scanlan also served as president of the Oregon Council of Teachers of English, frequently presented at council conferences, and has been published in the council's peer-reviewed Oregon English Journal. He has been active in the Oregon Education Association, including serving as a local building representative, treasurer, negotiation team leader, president, and board member.

Jardon Jaramillo

Jardon Jaramillo serves as Controller and Assistant Treasurer at Portland General Electric, communicating and managing financial results. He previously worked as Director of Compensation and Benefits from 2013 to 2016. As director, he was responsible for managing the company's defined benefit pension plan, as well as overseeing health care programs for all of PGE's employees. Before joining PGE, Mr. Jaramillo was a manager with Deloitte in the M&A Transactions Services consulting group. He spent his early career at Deloitte in the audit and assurance space. Mr. Jaramillo enjoys contributing to solutions to equity issues in the community and serves as Vice Chair of the Board of Metropolitan Family Services.

Mr. Jaramillo received an MBA from the Anderson School at the University of California Los Angeles, a BA in economics from Northwest Nazarene University, and is a Certified Public Accountant (CPA) licensed in Oregon.



Oregon Public Employees Retirement System Consultants

Actuary
Milliman, Inc.

Legal Counsel
Oregon Department of Justice

Auditor
Macias Gini & O'Connell LLP

Insurance Consultant
Butler Partners & Associates LLC

Medical Advisor
F. William Miller, MD

Investments
Investment managers are reported in the Schedule of Fees and Commissions on page 106

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Oregon Public Employees Retirement System

For its Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2020

Christopher P. Morrill

Executive Director/CEO

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

Financial Reporting Coordinator — Matthew Graves

Senior Investment Accountant — Michiru Farney

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2021

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

Mission

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

Core Values

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

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

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

Operating Principles

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

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

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

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

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FINANCIAL SECTION

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mGO Certified Public Accountants

Independent Auditor's Report

To the Honorable Kate Brown
Governor of Oregon

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

Report on the Financial Statements

We have audited the accompanying financial statements of the fiduciary activities and proprietary activities of the Oregon Public Employees Retirement System (the System), an agency of the State of Oregon, as of and for the fiscal year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Macias Gini & O'Connell LLP
500 Capitol Mall, Suite 2200
Sacramento, CA 95814

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, 2021, 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 Matter

As discussed in Note 9 to the financial statements, the total pension liability for the Defined Benefit Pension Plan, based on the actuarial valuation as of December 31, 2019, rolled forward to June 30, 2021, exceeded the plan's fiduciary net position by $12.0 billion. The actuarial valuation is very sensitive to the underlying assumptions, including a discount rate of 6.90 percent, which represents the long-term expected rate of return.

Our opinions are not modified with respect to this matter.

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, 2020, from which such partial information was derived.

We have previously audited the System's 2020 financial statements, and we expressed unmodified opinions on the respective financial statements of the fiduciary activities and the proprietary activities in our report dated December 1, 2020. In our opinion, the partial comparative information presented herein as of and for the fiscal year ended June 30, 2020, 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 the management's discussion and analysis, the schedule of changes in net pension liability/(asset) and related ratios, the schedule of investment returns – defined benefit pension plan, the schedule of defined benefit pension plan employer contributions, the schedule of changes in net OPEB (asset) and related ratios – OPEB Plan – RHIA, the schedule of investment returns – OPEB Plan – RHIA, the schedule of changes in net OPEB liability/(asset) and related ratios – OPEB Plan – RHIPA, the schedule of investment returns – OPEB Plan - RHIPA, the schedule of OPEB RHIA employer contributions, the schedule of OPEB RHIPA employer contributions, and the schedule of claims development information, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic

financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The other supplementary information and the introductory, investment, actuarial, and statistical sections, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

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

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

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 1, 2021, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Macias Gini & O'Connell LLP

Sacramento, California
December 1, 2021

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MANAGEMENT'S DISCUSSION AND ANALYSIS

This section presents management's discussion and analysis of the Oregon Public Employees Retirement System's (PERS or the System) financial performance during the fiscal year ended June 30, 2021. It is a narrative overview and analysis that we present in conjunction with the Letter of Transmittal included in the Introductory Section of this Annual Comprehensive Financial Report (ACFR). It should also be read in conjunction with PERS' basic financial statements, as presented in this report.

PERS is primarily responsible for administering retirement benefits, health insurance benefits, and supplemental retirement savings plans. PERS comprises six funds: a defined benefit pension plan, an individual account-based program under the PERS tax-qualified governmental plan, two Other Postemployment Benefit (OPEB) 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, OPEB, individual account-based program, and deferred compensation, along with the unrestricted net position of the proprietary fund administered by PERS as of June 30, 2021. It also summarizes the combined changes in net position restricted for pension benefits, other employee benefits and OPEB, the changes in unrestricted net position, and the cash flows of the proprietary fund for the fiscal year then ended, along with an actuarial measurement of the employers' total pension and OPEB liabilities compared to the fiduciary net position of the defined benefit pension and OPEB plans. The information available in each of these sections is briefly summarized below.

Fund Financial Statements

As of June 30, 2021, financial statements are presented for the two types of funds administered by PERS: fiduciary funds, where PERS acts in a fiduciary capacity as a trustee for others and is responsible for administering the assets placed under its control; and a proprietary fund, where fees are charged for services provided and the focus is on determining financial position, operating and non-operating income, changes in net position, and cash flows.

Fiduciary Funds include the Defined Benefit Pension Plan, Oregon Public Service Retirement Plan Individual Account Program (IAP), the Retirement Health Insurance Account (RHIA), the Retiree Health Insurance Premium Account (RHIPA), and the Deferred Compensation Plan, known as the Oregon Savings Growth Plan. Fiduciary funds are used to account for resources held for the benefit of PERS participants. A statement of fiduciary net position and a statement of changes in fiduciary net position are presented for the fiduciary funds as of and for the fiscal year ended June 30, 2021, along with comparative total information as of and for the fiscal year ended June 30, 2020. 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 fiscal year ended June 30, 2021, along with comparative total information as of and for the fiscal year ended June 30, 2020. These financial statements reflect the net position, changes in net position, and cash flows resulting from PERS business-type activities.

Notes to the Basic Financial Statements

- Note 1 – provides a summary of significant accounting policies, including the basis of accounting for each of the fund types: investment accounting policies, management's use of estimates, and other significant accounting policies.
- Note 2 – provides a general description of PERS as well as a description of each of the funds administered by PERS. Information regarding employer and member participation in the pension and OPEB plans administered by PERS is also provided.
- Note 3 – provides information on the System's accounts receivables and payables.
- Note 4 – provides information on cash and cash equivalents. The note also describes investments, including the techniques and inputs used to determine fair value, investing authority, investment risk categorizations, and additional information about unfunded investment commitments, securities lending, and derivatives.
- Note 5 – provides information about capital assets used in plan operations.
- Note 6 – provides information on reserves.
- Note 7 – provides information on potential contingencies of PERS.
- Note 8 – provides information on the estimated claims liability of the SRHIA.
- Note 9 – provides information on the Employers' Net Pension Liability.
- Note 10 – provides information on Employers' Net OPEB Liability/(Asset).
- Note 11 – provides information about subsequent events.

Required Supplementary Information

In addition to the financial statements and notes explained above, this ACFR includes 10 additional Required Supplementary Information schedules with historical trend information, as described below:

- The Schedule of Changes in Net Pension Liability/(Asset) and Related Ratios, page 76, presents the pension plan's change in total pension liability, change in the fiduciary net position, net pension liability/(asset), fiduciary net position as a percentage of the total pension liability, total covered payroll, and net pension liability/(asset) as a percentage of covered payroll. This required 10-year trend schedule will disclose future years prospectively, beginning with the fiscal year ended June 30, 2014.
- The Schedule of Investment Returns – Defined Benefit Pension Plan, page 76, 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 the fiscal year ended June 30, 2014.
- The Schedule of Defined Benefit Pension Plan Employer Contributions, pages 77 and 78, contains a 10-year schedule comparing the amount of actuarially determined contributions with the amount of contributions recognized in relation to the actuarially determined contributions, and showing whether there is a contribution deficiency or excess. The schedule also shows the amounts of contributions recognized by the pension plan in relation to the actuarially determined contributions as a percentage of covered payroll.
- The Schedules of Changes in Net OPEB Liability/(Asset) and Related Ratios for RHIA, page 79, and RHIPA, page 80, presents the OPEB plan's change in the total OPEB liability, change in the fiduciary net position, net OPEB liability/(asset), fiduciary net position as a percentage of the total OPEB liability, total covered payroll, and net OPEB liability/(asset) as a percentage of covered payroll.

These required 10-year trend schedules will disclose future years prospectively, beginning with the fiscal year ended June 30, 2017.

- The Schedules of Investment Returns – OPEB Plans for RHIA and RHIPA, pages 79 and 80, respectively, present for each fiscal year the annual money-weighted return (internal rate of return) for each of the OPEB plan investments, net of OPEB plan investment expense. These required 10-year trend schedules will disclose future years prospectively, beginning with the fiscal year ended June 30, 2017.
- The Schedules of OPEB Plan Employer Contributions for both RHIA and RHIPA, pages 81–84, contain a 10-year schedule comparing the amount of actuarially determined contributions with the amount of contributions recognized in relation to the actuarially determined contributions, and showing whether there is a contribution deficiency or excess. The schedules also show the amounts of contributions recognized by the OPEB plans in relation to the actuarially determined contributions as a percentage of covered payroll.
- The Schedule of Claims Development Information for SRHIA, page 85, shows earned revenues and expenses over the past ten years.

Other Supplementary Information

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

- The Schedule of Plan Net Position and Schedule of Changes in Plan Net Position – Defined Benefit Pension Plan, pages 87–90, display the components of the defined benefit pension plan.
- The Schedule of Administrative Expenses and Schedule of Payments to Consultants and Contractors on pages 91 and 92 show the costs of managing the System.
- The Summary of Investment Fees, Commissions, and Expenses, pages 93-95, provides the detail of investment-related expenses included in the Investment Expense line item reported in the Statement of Changes in Fiduciary Net Position.

FIDUCIARY FUNDS

- PERS' assets exceeded its liabilities at the close of fiscal year 2021, with $100,775.4 million restricted for pension, IAP, OPEB, and deferred compensation benefits.
- Fiduciary net position increased by $19,369.8 million, or 23.8 percent, primarily because of the $21,131.0 million increase in investment income due to financial market conditions.
- Revenues (additions to fiduciary net position), which include member and employer contributions of $3,066.9 million and investment activities totaling $22,375.1 million, were up 473.4 percent to $25,444.3 million for fiscal year 2021, compared to $4,437.1 million in fiscal year 2020. This increase was attributed to a $21,131.0 million increase in revenues from investment activities compared to the prior year, offset by a $121.6 million decrease in member and employer contributions.
- Expenses (deductions from fiduciary net position) increased 3.0 percent to $6,074.5 million during the fiscal year from $5,898.2 million in fiscal year 2020, primarily due to a similar increase in benefit payments.

FIDUCIARY NET POSITION

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

- The net position of the Defined Benefit Pension Plan increased approximately $16,012.0 million, or 23.4 percent, during the fiscal year ended June 30, 2021, primarily because of a $18,075.2 million, or 1,957.8 percent increase in net investment and other income.
- The net position of the OPSRP IAP increased approximately $2,548.6 million, or 24.9 percent, during the fiscal year ended June 30, 2021, primarily because of a $2,318.3 million, or 955.5 percent, increase in net investment and other income.
- The net position of the Deferred Compensation Plan increased approximately $643.0 million, or 29.5 percent, during the fiscal year ended June 30, 2021, primarily because of a $556.1 million, or 758.3 percent increase in net investment and other income.
- The net position of the RHIA increased approximately $142.2 million, or 23.2 percent, during the fiscal year ended June 30, 2021, primarily because of a $163.2 million, or 1,899.1 percent increase in net investment and other income.
- The net position of the RHIPA increased approximately $24.1 million, or 44.3 percent, during the fiscal year ended June 30, 2021, primarily because of a $15.5 million, or 2,011.0 percent increase in net investment and other income.

CHANGES IN FIDUCIARY NET POSITION

Revenues – Additions to Fiduciary Net Position

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

- For fiscal year 2021, the financial markets stabilized, which resulted in an increase in Net Investment and Other Income for all plans. See the Investment Activities section on page 28 for further discussion.
- Defined Benefit Pension Plan: Total additions for fiscal year 2021 increased $18,087.7 million, or 559.6 percent, compared to fiscal year 2020. This increase was chiefly attributed to the $18,075.2 million, or 1,957.8 percent, increase in Net Investment and Other Income.
  - Employer Contributions appeared to decline $137.6 million in fiscal year 2021; however with the closure of the first cycle of the Employer Incentive Fund (EIF) program (established by the Employer Programs project of SB 1049) on December 1, 2020, side account payments dropped significantly in fiscal year 2021, compared to fiscal year 2020. Without side account payments, the actual amount of Employer Contributions in fiscal year 2021 increased $154.5 million, or 8.0 percent, compared to fiscal year 2020, primarily due to salary and cost of living adjustment increases.
  - Member Contributions increased substantially in fiscal year 2021 because of the implementation of the Member Redirect project of SB 1049, which redirects a portion of each member's Individual Account Program contributions to the member's Employee Pension Stability Account (EPSA), which will be used to help fund that member's future benefit. As a result, Member Contributions increased $150.1 million, or 1,474.9 percent, in fiscal year 2021 compared to fiscal year 2020.
- The Individual Account Program: Total additions increased $2,185.5 million, or 229.1 percent, because of the $2,318.3 million, or 955.5 percent, increase in Net Investment and Other Income, which was offset by a $132.8 million decrease in Member Contributions. The decrease in Member Contributions is directly correlated to the implementation of the Member Redirect program of SB 1049, as discussed under the Defined Benefit Pension Plan above.
- Deferred Compensation Plan: The Oregon Savings Growth Plan had a $558.1 million, or 249.3

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

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2021	2020	2021	2020	2021	2020
Cash and Receivables	$ 4,641,088	$ 4,215,079	$ 900,682	$ 817,282	$ 18,691	$ 29,442
Investments at Fair Value	81,586,458	66,312,176	12,093,590	9,646,811	2,806,582	2,151,257
Securities Lending Collateral	568,547	709,926	64,868	77,485	–	3
Other	31,693	25,647	1,013	532	–	–
Total Assets	86,827,786	71,262,828	13,060,153	10,542,110	2,825,273	2,180,702
Investment Purchases	1,888,776	2,179,278	163,331	190,527	3,245	1,180
Securities Lending Payable	568,592	710,431	64,873	77,540	–	3
Other Payables	39,102	53,822	40,941	31,657	274	738
Total Liabilities	2,496,470	2,943,531	269,145	299,724	3,519	1,921
Total Net Position	$ 84,331,316	$ 68,319,297	$ 12,791,008	$ 10,242,386	$ 2,821,754	$ 2,178,781

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

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2021	2020	2021	2020
Cash and Receivables	$ 42,968	$ 34,040	$ 6,135	$ 7,670
Investments at Fair Value	732,522	606,438	73,714	48,024
Securities Lending Collateral	5,134	6,525	517	521
Other	66	28	7	2
Total Assets	780,690	647,031	80,373	56,217
Investment Purchases	15,504	18,663	1,297	1,268
Securities Lending Payable	5,134	6,530	517	521
Other Payables	7,144	11,094	163	89
Total Liabilities	27,782	36,287	1,977	1,878
Total Net Position	$ 752,908	$ 610,744	$ 78,396	$ 54,339

percent, increase in total additions. Like the other plans, this increase was because of the $556.6 million, or 758.3 percent, increase in Net Investment and Other Income compared to fiscal year 2020. Member Contributions increased a modest $1.5 million, or 1.0 percent over fiscal year 2020.

- Retirement Health Insurance Account: Total additions increased $159.8 million, or 1,068.7 percent. The increase is primarily because of the $163.2 million, or 1,899.1 percent, increase in Investment and Other Income, offset by a $3.4 million, or 53.4 percent, decrease in Employer Contributions. This decrease in Contributions was because of $3.9 million in Employers Contribution corrections from prior fiscal years that were processed in fiscal year 2020.

- Retiree Health Insurance Premium Account: Total additions increased $16.0 million, or 133.2 percent, over the fiscal year 2020. This increase was primarily due to the $15.5 million, or 2,011.0 percent, increase in Net Investment and Other Income.

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.

- Defined Benefit Pension Plan: Pension benefit and other expenses were $5,308.2 million in fiscal year 2021, a $191.3 million, or 3.7 percent, increase over fiscal year 2020 expenses of $5,116.9 million, primarily because of the 1.9 percent net increase in the number of retirees, as well as the annual cost of living adjustment. See service retirements discussed on page 29.
- Individual Account Program: IAP benefit and other expenses decreased by $32.7 million, or 5.3 percent, during the year, from $623.4 million in fiscal year 2020 to $590.7 million in fiscal year 2021. The decrease in IAP benefit payments is consistent with the decrease in the number of service retirements discussed on page 29.
- Deferred Compensation Plan: Deferred compensation benefits and other expenses increased by $18.6 million, or 15.5 percent, from $120.4 million in fiscal year 2020 to $139.0 million in fiscal year 2021, because of a increases in requests for rollovers and distributions.
- Retirement Health Insurance Account: RHIA healthcare premium and other expenses decreased by $478.0 thousand, or 1.4 percent, from $33.1 million in fiscal year 2020 to $32.6 million in fiscal year 2021. This decrease is attributed to a $493.0 thousand, or 1.6 percent, decrease in Healthcare Premium Subsidies, which is consistent with the decrease in participants.
- Retiree Health Insurance Premium Account: RHIPA healthcare premium and other expenses decreased by $402.0 thousand, or 9.2 percent, from $4.4 million in fiscal year 2020 to $4.0 million in fiscal year 2021, primarily due to a decrease in participants.

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

PROPRIETARY FUND

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

Net Position

- The net position of the SRHIA as of June 30, 2021, was $99.8 million, a $0.9 million, or 0.9 percent, increase over fiscal year 2020. This increase was primarily because of the modest increase of net income.

TABLE 3

CHANGES IN FIDUCIARY NET POSITION, PENSION

(in thousands) For the Fiscal Years Ended June 30:

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2021	2020	2021	2020	2021	2020
Additions:						
Employer Contributions	$ 2,161,451	$ 2,299,006	$ –	$ –	$ –	$ –
Member Contributions	160,309	10,179	578,414	711,193	151,996	150,478
Net Investment and Other Income	18,998,416	923,261	2,560,936	242,628	630,011	73,406
Total Additions	21,320,176	3,232,446	3,139,350	953,821	782,007	223,884
Deductions:						
Pension Benefits	5,237,138	5,045,931	577,900	611,602	136,615	118,350
Other	71,019	70,939	12,828	11,828	2,419	2,071
Total Deductions	5,308,157	5,116,870	590,728	623,430	139,034	120,421
Net Increase (Decrease)	16,012,019	(1,884,424)	2,548,622	330,391	642,973	103,463
Net Position						
Beginning of Year	68,319,297	70,203,721	10,242,386	9,911,995	2,178,781	2,075,318
End of Year	$ 84,331,316	$ 68,319,297	$ 12,791,008	$ 10,242,386	$ 2,821,754	$ 2,178,781

TABLE 4

CHANGES IN FIDUCIARY NET POSITION, OTHER POSTEMPLOYMENT BENEFITS

(in thousands) For the Fiscal Years Ended June 30:

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2021	2020	2021	2020
Additions:				
Employer Contributions	$ 2,963	$ 6,360	$ 11,724	$ 11,242
Net Investment and Other Income	171,823	8,595	16,297	772
Total Additions	174,786	14,955	28,021	12,014
Deductions:				
Healthcare Premium Subsidies	31,335	31,828	3,673	4,113
Other	1,287	1,273	291	253
Total Deductions	32,622	33,101	3,964	4,366
Net Increase (Decrease)	142,164	(18,146)	24,057	7,648
Net Position				
Beginning of Year	610,744	628,890	54,339	46,691
End of Year	$ 752,908	$ 610,744	$ 78,396	$ 54,339

Changes in Net Position

- SRHIA insurance premiums and other revenue for the fiscal year ended June 30, 2021, was $31.3 million, a $1.2 million, or 3.7 percent, decrease from fiscal year 2020. This decrease was primarily because of a similar decrease in investment income from Securities Lending Collateral.
- SRHIA healthcare and other expenses for the fiscal year ended June 30, 2021, increased $7.1 million, or 30.7 percent, from $23.3 million in fiscal year 2020 to $30.4 million in fiscal year 2021 primarily because of increases in claims as providers began to reopen following the initial pandemic shutdown. Additionally, the decreases in claims expense related to the change in financing arrangement ended in December 2020 as the program came to a close.

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

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

	Standard Retiree Health Insurance Account	
	2021	2020
Cash and Receivables	$ 102,024	$ 101,316
Net OPEB Asset	2	6
Securities Lending Collateral	302	1,414
Total Assets	102,328	102,736
Deferred Outflows of Resources:		
Pensions	184	174
OPEB	2	1
Total Deferred Outflows of Resources	186	175
Claims Payable	830	630
Other Payables	968	1,335
Securities Lending Payable	302	1,414
Net Pension Liability	549	547
Other Liabilities	40	43
Total Liabilities	2,689	3,969
Deferred Inflows of Resources:		
Pensions	12	26
OPEB	2	3
Total Deferred Inflows of Resources	14	29
Total Net Position	$ 99,811	$ 98,913

TABLE 6

REVENUES, EXPENSES, AND CHANGES IN NET POSITION, PROPRIETARY FUND

(in thousands) For the Fiscal Years Ended June 30:

	Standard Retiree Health Insurance Account	
	2021	2020
Revenues:		
Insurance Premiums	$ 30,380	$ 30,379
Reinsurance Reimbursements	6	23
Investment Income	888	2,083
Total Revenues	31,274	32,485
Expenses:		
Claims	25,743	18,502
Change in Estimated Liabilities	200	(235)
Administrative Expense	4,433	4,982
Total Expenses	30,376	23,249
Net Increase	898	9,236
Net Position		
Beginning of Year	98,913	89,677
End of Year	$ 99,811	$ 98,913

NET PENSION LIABILITY

The Employers' Net Pension Liability (NPL) as of June 30, 2021, was $11,966.5 million, compared to a Net Pension Liability of $21,823.4 million as of June 30, 2020. The $9,856.9 million, or 45.2 percent, decrease in Employers' Net Pension Liability was primarily because of a $16,012.0 million increase in Fiduciary Net Position, offset by a $6,155.1 million increase in Total Pension Liability.

NET OPEB LIABILITY/(ASSET)

The Employers' Net OPEB Asset for RHIA as of June 30, 2021, was $343.4 million, compared to the Net OPEB Asset of $203.8 million as of June 30, 2020. The increase in Employers' Net OPEB Asset was primarily due to a $142.2 million increase in the Fiduciary Net Position. The Employer's Net OPEB Asset for RHIPA as of June 30, 2021, was $15.5 million, compared to the Net OPEB Liability of $10.0 million as of June 30, 2020. The decrease in Employers' Net OPEB Liability was primarily due a $24.1 million increase in the Fiduciary Net Position.

INVESTMENT ACTIVITIES

During fiscal year 2021, investments increased 23.5 percent over the prior fiscal year as markets moved toward more stability. Holdings in all asset classes experienced positive investment returns. The Private Equity portfolio increased by $7,245.3 million, or 39.2 percent; Public Equity portfolio increased $6,586.1 million, or 24.9 percent; the Alternative portfolio increased $1,438.6 million, or 17.5 percent; the Real Estate portfolio increased $1,420.1 million, or 16.3 percent; the Debt Securities portfolio increased $1,364,2 million, or 9.0 percent; and the Opportunity portfolio increased $473.9 million, or 28.7 percent. One-year returns on asset classes and comparative benchmarks are presented in the table on page 31.

PLAN MEMBERSHIP

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

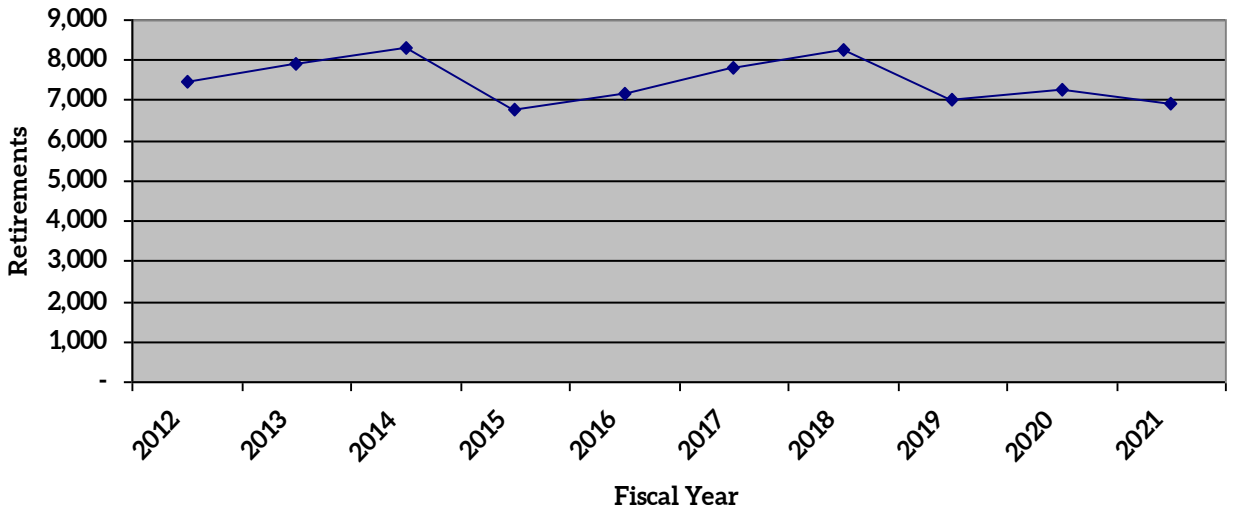
TABLE 7
CHANGES IN PLAN MEMBERSHIP
As of June 30:

	2021	2020	Percentage Change
Retirees and beneficiaries receiving benefits:			
General	143,495	141,085	1.7 %
Police and Fire	13,005	12,537	3.7
Total	156,500	153,622	1.9
Current and terminated employees:			
Vested:			
General	209,298	206,055	1.6
Police and Fire	18,178	17,820	2.0
Nonvested:			
General	949	1,264	(24.9)
Police and Fire	57	68	(16.2)
Total	228,482	225,207	1.5 %

RETIREMENTS FROM SERVICE

Retirements from service decreased 5.1 percent in fiscal year 2021, primarily because of a decrease in inactive members receiving benefits. Service retirements in fiscal year 2021 were 6,917 compared to 7,291 in fiscal year 2020.

TABLE 8
RETIREMENTS FROM SERVICE
By Fiscal Year



CURRENTLY KNOWN FACTS, CONDITIONS, OR DECISIONS

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

At the July 23, 2021 meeting, the PERS Board preliminarily determined the assumed rate would be 6.90 percent will be effective for PERS transactions beginning January 1, 2022. The assumed rate was then adopted in an administrative rule at the October 1, 2021 meeting.

Since June 30, 2021, 29 school districts and community college employers participated in the issuance of pension obligation bonds, resulting in lump-sum deposits to new side accounts with PERS totaling $1,339.2 billion.

CONTACTING THE SYSTEM'S FINANCIAL MANAGEMENT

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

Table 9
Investment Results*
Periods Ended June 30,

	2021	2020
Total Portfolio, Excluding Variable Account	25.54 %	0.52 %
Policy Benchmark[1]	26.89	2.60
Variable Account	41.29	1.49
Benchmark: MSCI All Country World Investable Market Index Net	40.94	1.17
Domestic Stocks	46.86	0.20
Benchmark: Russell 3000 Index	44.16	6.53
International Stocks	43.12	(4.21)
Benchmark: MSCI All Country World ex-US Investable Market Index Net	37.18	(4.74)
Fixed Income Segment	1.27	7.75
Benchmark: Custom Index[2]	0.67	7.70
Risk Parity[4]	21.51	n/a
Benchmark: S&P Risk Parity - 12% Target Volatility	31.51	n/a
Real Estate	8.18	4.57
Benchmark: Oregon Custom Real Estate Benchmark[3]	1.47	3.93
Private Equity	44.12	1.07
Benchmark: Russell 3000 Index + 300 bps	67.21	(6.37)
Alternatives Portfolio	11.48	(9.84)
Benchmark: Consumer Price Index + 400 bps	9.59	4.67
Opportunity Portfolio	31.52	(0.34)
Benchmark: Consumer Price Index + 500 bps	9.59	5.68

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

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

[1] From April 1, 2018, to present, the policy benchmark is 19% Russell 3000+300 Bps quarter lag, 22% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 39% MSCI ACWI IMI Net, and 7.5% CPI+4%.

[2] From March 1, 2016, to present, index is 46% Barclays Aggregate Bond, 37% Barclays Treasury, 13% S&P LSTA, and 4% BofA ML High Yield Master II.

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

[4] Inception date was May 1, 2020.

Basic Financial Statements

Statement of Fiduciary Net Position
Pension and Other Postemployment Plans
As of June 30, 2021, with Comparative Totals as of June 30, 2020

			Defined Benefit OPEB Plans	
	Defined Benefit Pension Plan	Oregon Public Service Retirement Plan Individual Account Program	Retirement Health Insurance Account	Retiree Health Insurance Premium Account
Assets:				
Cash and Cash Equivalents	$ 3,228,977,050	$ 766,538,724	$ 32,329,268	$ 3,845,957
Receivables:				
Employer	33,988,623	–	1,670,915	1,299,750
Plan Member	–	21,426,477	–	–
Interest and Dividends	117,563,313	13,381,959	1,061,307	106,800
Member Loans	–	–	–	–
Investment Sales and Other Receivables	888,553,976	99,329,628	7,906,235	882,092
Transitional Liability	358,150,836	–	–	–
Total Receivables	1,398,256,748	134,138,064	10,638,457	2,288,642
Due from Other Funds	13,853,893	5,377	22	112
Investments:				
Debt Securities	13,256,623,878	2,725,000,602	119,674,624	12,042,972
Public Equity	25,926,919,722	4,541,964,344	230,053,913	23,150,546
Real Estate	9,033,294,860	1,028,239,011	81,548,377	8,206,291
Private Equity	22,892,391,776	2,605,787,883	206,661,847	20,796,580
Alternatives Portfolio	8,585,393,917	977,255,486	77,504,936	7,799,396
Opportunity Portfolio	1,891,834,290	215,343,111	17,078,599	1,718,636
Total Investments	81,586,458,443	12,093,590,437	732,522,296	73,714,421
Securities Lending Collateral	568,547,038	64,867,874	5,133,755	516,843
Prepaid Expenses	10,087,181	835,297	66,246	6,666
Capital Assets at Cost, Net	21,605,454	177,859	–	–
Total Assets	**86,827,785,807**	**13,060,153,632**	**780,690,044**	**80,372,641**
Liabilities:				
Investment Purchases and Accrued Expenses	1,888,775,230	163,331,196	15,503,607	1,296,750
Deposits and Other Liabilities	39,023,538	27,512,220	7,106,378	128,267
Due Other Funds	78,131	13,428,661	38,185	34,796
Securities Lending Collateral Due Borrowers	568,592,471	64,873,045	5,134,165	516,884
Total Liabilities	**2,496,469,370**	**269,145,122**	**27,782,335**	**1,976,697**
Net Position:				
Restricted for:				
Pension	84,331,316,437	–	–	–
Individual Account Program	–	12,791,008,510	–	–
Other Postemployment Benefits	–	–	752,907,709	78,395,944
Deferred Compensation Plan	–	–	–	–
Total Net Position	**$ 84,331,316,437**	**$ 12,791,008,510**	**$ 752,907,709**	**$ 78,395,944**

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

Deferred Compensation Plan	2021	2020
$ 5,086,433	$ 4,036,777,432	$ 3,392,682,620
–	36,959,288	33,083,939
–	21,426,477	15,183,409
527,219	132,640,598	132,638,273
13,051,681	13,051,681	13,182,681
25,761	996,697,692	1,107,549,274
–	358,150,836	405,156,056
13,604,661	1,558,926,572	1,706,793,632
–	13,859,404	4,037,104
464,569,066	16,577,911,142	15,213,720,452
2,342,012,543	33,064,101,068	26,478,003,098
–	10,151,288,539	8,731,171,187
–	25,725,638,086	18,480,372,903
–	9,647,953,735	8,209,320,304
–	2,125,974,636	1,652,118,971
2,806,581,609	97,292,867,206	78,764,706,915
275	639,065,785	794,459,199
–	10,995,390	3,401,783
–	21,783,313	22,807,053
2,825,272,978	**103,574,275,102**	**84,688,888,306**
3,245,031	2,072,151,814	2,390,915,048
93,840	73,864,243	93,443,669
180,458	13,760,231	3,957,545
275	639,116,840	795,024,978
3,519,604	**2,798,893,128**	**3,283,341,240**
–	84,331,316,437	68,319,296,993
–	12,791,008,510	10,242,385,753
–	831,303,653	665,083,846
2,821,753,374	2,821,753,374	2,178,780,474
$ 2,821,753,374	**$ 100,775,381,974**	**$ 81,405,547,066**

Statement of Changes in Fiduciary Net Position
Pension and Other Postemployment Plans
For the Fiscal Year Ended June 30, 2021, with Comparative Totals for the Fiscal Year Ended June 30, 2020

			Defined Benefit OPEB Plans	
	Defined Benefit Pension Plan	Oregon Public Service Retirement Plan Individual Account Program	Retirement Health Insurance Account	Retiree Health Insurance Premium Account
Additions:				
Contributions:				
Employer	$ 2,161,450,927	$ –	$ 2,963,356	$ 11,724,345
Plan Member	160,309,347	578,414,037	–	–
Total Contributions	2,321,760,274	578,414,037	2,963,356	11,724,345
Investment Income:				
Net Appreciation in Fair Value of Investments	18,329,218,733	2,486,750,549	165,691,061	15,734,655
Interest, Dividends and Other Investment Income	1,545,558,973	177,392,486	14,121,857	1,310,725
Total Investment Income	19,874,777,706	2,664,143,035	179,812,918	17,045,380
Less Investment Expense	(881,072,454)	(104,182,437)	(8,033,750)	(752,347)
Net Investment Income	18,993,705,252	2,559,960,598	171,779,168	16,293,033
Securities Lending Income:				
Securities Lending Income	6,332,557	710,693	57,966	5,227
Less Securities Lending Expense	(1,631,117)	(183,648)	(14,924)	(1,361)
Net Securities Lending Income	4,701,440	527,045	43,042	3,866
Other Income	8,938	448,762	–	–
Total Additions	21,320,175,904	3,139,350,442	174,785,566	28,021,244
Deductions:				
Benefits	5,232,215,034	577,899,925	–	–
Death Benefits	4,922,561	–	–	–
Refunds of Contributions	11,934,465	–	–	–
Administrative Expense	59,084,400	12,827,760	1,287,002	292,231
Healthcare Premium Subsidies	–	–	31,334,950	3,672,820
Total Deductions	5,308,156,460	590,727,685	32,621,952	3,965,051
Net Increase/(Decrease)	**16,012,019,444**	**2,548,622,757**	**142,163,614**	**24,056,193**
Net Position				
Beginning of Year	68,319,296,993	10,242,385,753	610,744,095	54,339,751
End of Year	**$ 84,331,316,437**	**$ 12,791,008,510**	**$ 752,907,709**	**$ 78,395,944**

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

Deferred Compensation Plan	2021	2020
$ –	$ 2,176,138,628	$ 2,316,607,613
151,995,862	890,719,246	871,851,083
151,995,862	3,066,857,874	3,188,458,696
614,709,150	21,612,104,148	138,126,754
18,989,801	1,757,373,842	1,945,570,488
633,698,951	23,369,477,990	2,083,697,242
(5,640,215)	(999,681,203)	(846,093,878)
628,058,736	22,369,796,787	1,237,603,364
–	7,106,443	20,326,482
–	(1,831,050)	(13,858,257)
–	5,275,393	6,468,225
1,952,606	2,410,306	4,591,155
782,007,204	25,444,340,360	4,437,121,440
136,614,998	5,946,729,957	5,769,708,864
–	4,922,561	6,174,392
–	11,934,465	18,855,297
2,419,306	75,910,699	67,509,716
–	35,007,770	35,940,420
139,034,304	6,074,505,452	5,898,188,689
642,972,900	**19,369,834,908**	**(1,461,067,249)**
2,178,780,474	81,405,547,066	82,866,614,315
$ 2,821,753,374	**$ 100,775,381,974**	**$ 81,405,547,066**

Statement of Net Position
Proprietary Fund
As of June 30, 2021, with Comparative Totals as of June 30, 2020

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2021	2020
Assets:		
Current Assets		
Cash and Cash Equivalents	$ 102,023,985	$ 100,636,981
Reinsurance Reimbursements and Rebate Receivables	–	678,640
Securities Lending Collateral	302,207	1,413,928
Total Current Assets	**102,326,192**	**102,729,549**
Noncurrent Assets		
Net OPEB Asset	1,802	6,164
Total Noncurrent Assets	**1,802**	**6,164**
Total Assets	**102,327,994**	**102,735,713**
Deferred Outflows of Resources		
Pension	184,031	173,715
OPEB	2,387	1,389
Total Deferred Outflows of Resources	**186,418**	**175,104**
Liabilities:		
Current Liabilities		
Accrued Expenses	840,577	1,234,622
Compensated Absences	26,093	18,866
Due to Other Funds	99,173	79,559
Estimated Insurance Claims Due	830,000	630,000
Pension Obligation Bonds	2,153	2,041
Securities Lending Collateral Due Borrowers	302,207	1,413,928
Total Current Liabilities	**2,100,203**	**3,379,016**
Noncurrent Liabilities		
Compensated Absences	14,050	10,560
Pension Obligation Bonds	15,160	17,608
Other Liabilities	10,482	13,993
Net Pension Liability	549,185	546,935
Total Noncurrent Liabilities	**588,877**	**589,096**
Total Liabilities	**2,689,080**	**3,968,112**
Deferred Inflows of Resources		
Pension	12,477	26,075
OPEB	2,417	3,201
Total Deferred Inflows of Resources	**14,894**	**29,276**
Net Position:		
Restricted for:		
OPEB	1,772	4,352
Unrestricted	99,808,666	98,909,077
Total Net Position	**$ 99,810,438**	**$ 98,913,429**

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

Statement of Revenues, Expenses, and Changes in Net Position
Proprietary Fund
For the Fiscal Year Ended June 30, 2021, with Comparative Totals for the Fiscal Year Ended June 30, 2020

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2021	2020
Operating Revenues:		
Insurance Premium Revenue	$ 30,379,505	$ 30,379,203
Reinsurance Reimbursements	6,102	22,490
Total Operating Revenues	30,385,607	30,401,693
Operating Expenses:		
Claims Expense	25,743,066	18,501,809
Increase/(Decrease) in Estimated Liabilities	200,000	(235,000)
Administrative Expense	4,433,395	4,982,230
Total Operating Expenses	30,376,461	23,249,039
Operating Income	**9,146**	**7,152,654**
Non-Operating Revenues:		
Interest, Dividends, and Other Investment Income	887,863	2,083,442
Securities Lending Income	597	14,671
Less Securities Lending Expense	(597)	(14,671)
Net Securities Lending Income	–	–
Total Non-Operating Revenues	887,863	2,083,442
Change in Net Position	897,009	9,236,096
Total Net Position		
Beginning of Year	98,913,429	89,677,333
End of Year	**$ 99,810,438**	**$ 98,913,429**

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

Statement of Cash Flows
Proprietary Fund
For the Fiscal Year Ended June 30, 2021, with Comparative Totals for the Fiscal Year Ended June 30, 2020

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2021	2020
Cash Flows from Operating Activities:		
Insurance Premiums and Reinsurance Reimbursements	$ 31,064,247	$ 47,525,180
Claims Paid	(25,743,066)	(18,501,809)
Other Payments	(4,822,040)	(3,978,057)
Net Cash Provided by Operating Activities	**499,141**	**25,045,314**
Cash Flows from Investing Activities:		
Interest and Dividends Received	887,863	2,083,442
Net Increase in Cash and Cash Equivalents	1,387,004	27,128,756
Cash and Cash Equivalents Beginning of Year	100,636,981	73,508,225
Cash and Cash Equivalents End of Year	$ 102,023,985	$ 100,636,981
Reconciliation of Operating Income to Net Cash Provided by Operating Activities		
Operating Income	$ 9,146	$ 7,152,654
Adjustments to reconcile operating income to net cash provided by operating activities:		
Changes in assets, deferred outflows of resources, liabilities, and deferred inflows of resources:		
Reinsurance Reimbursements and Rebate Receivables	678,640	17,123,487
Net OPEB Asset	4,362	(2,462)
Deferred Outflows of Resources - Pension	(10,316)	1,239
Deferred Outflows of Resources - OPEB	(998)	2,056
Accrued Expenses	(394,045)	903,017
Compensated Absences	10,717	3,314
Due to Other Funds	19,614	6,331
Estimated Insurance Claims Due	200,000	(235,000)
Pension Obligation Bonds	(2,336)	(1,989)
Other Liabilities	(3,511)	(2,301)
Net Pension Liability	2,250	92,810
Deferred Inflows of Resources - Pension	(13,598)	551
Deferred Inflows of Resources - OPEB	(784)	1,607
Net Cash Provided by Operating Activities	**$ 499,141**	**$ 25,045,314**

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

Note 1 - Summary of Significant Accounting Policies

A. Reporting Entity

The accompanying financial statements include all activities and funds administered by the Oregon Public Employees Retirement System (PERS or the System). The Defined Benefit and OPEB plans are fiduciary component units of the State of Oregon for financial reporting purposes. PERS financial statements are included in fiduciary and proprietary funds in the *State of Oregon's Annual Comprehensive Financial Report (ACFR).*

B. Basis of Presentation

The accompanying financial statements are prepared on the basis of a fiscal year ended June 30, 2021, in accordance with generally accepted accounting principles in the United States of America as set forth in Governmental Accounting Standards Board (GASB) pronouncements that apply to governmental accounting for fiduciary funds and enterprise funds. Fiduciary funds are used to account for assets held by a governmental unit in a trustee capacity (trust funds). Proprietary funds may be used to report any activity for which a fee is charged to external users for goods or services.

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

- Defined Benefit Pension Plan, a cost-sharing, multiple-employer plan, which includes the Variable Annuity Account.
- Oregon Public Service Retirement Plan – Individual Account Program, an individual account-based program under the PERS tax-qualified governmental plan.
- Retirement Health Insurance Account, a cost-sharing, multiple-employer plan.
- Retiree Health Insurance Premium Account, a single-employer plan.
- Deferred Compensation Plan (Oregon Savings Growth Plan).

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

- Standard Retiree Health Insurance Account.

C. Basis of Accounting

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

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

D. Investments

Oregon Revised Statute (ORS) 293.706 established the Oregon Investment Council (OIC), which consists of five voting members. Four members of the council, who are qualified by training and experience in the field of investment or finance, are appointed by the governor subject to state senate confirmation. The state treasurer serves as the council's remaining voting member. In addition, the director of PERS 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 composed of the Defined Benefit Pension Plan, the Individual Account Program, the Other Postemployment Benefit plans, and the Deferred Compensation Fund. OIC establishes policies for the investment and reinvestment of moneys in the investment funds as well as the acquisition, retention, management, and disposition of investments in the investment funds. OIC is also responsible for providing an examination of the effectiveness of the investment program.

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

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

Investments are recognized at fair value — the amount that could be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Investments that do not have a readily determinable fair value are valued using the net asset value (NAV) per share. Such values generally represent PERS' ownership interest in partnership capital.

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

Investments in real estate, other than publicly traded REITs, for which observable market prices in active markets do not exist, are reported at fair value as of June 30, 2021, 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, 2021, 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. When 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, 2021, 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) and (2) the income approach (e.g., the discounted cash flow method).

Due to the inherent uncertainty and the degree of judgment involved in determining real estate, private equity, opportunity and alternatives portfolios 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 fair value for the investments existed, and the difference could be material. In addition, these investments are generally considered to be illiquid long-term investments, and the recorded fair values may materially differ from the amounts that eventually may be realized from the sale or other disposition of these investments.

OIC has approved the following asset classes for the OPERF: Short-Term Investments, Fixed Income,

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

Table 1 below displays the OIC-approved asset allocation policy. See the Long-Term Expected Rate of Return Table 31 on page 74.

TABLE 1

Asset Class	Target Allocation Through June 2, 2021	Target Allocation After June 2, 2021
Cash	0.0%	0.0%
Debt Securities	20.0%	20.0%
Public Equity	32.5%	30.0%
Private Equity	17.5%	20.0%
Real Estate	12.5%	12.5%
Alternatives Portfolio	15.0%	15.0%
Risk Parity*	2.5%	2.5%
Total	100.0%	100.0%

* Risk Parity asset class/strategy included within Alternatives Portfolio on the Statement of Fiduciary Net Position

E. Earnings Crediting

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

F. Administrative Costs

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

G. Use of Estimates in the Preparation of Financial Statements

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

H. Comparative Totals

The basic financial statements include certain prior year summarized comparative information in total, but not at the level of detail required for a presentation in conformity with the accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements as of and for the fiscal year ended June 30, 2020, from which the summarized information was derived.

I. Effect of New Governmental Accounting Standards Board (GASB) Pronouncement GASB Statement No. 98

In October 2021, GASB issued Statement No. 98, Annual Comprehensive Financial Report, to replace the existing term used in reference to the annual comprehensive financial report. PERS has early implemented this standard for the fiscal year ended June 30, 2021 and all references have been updated accordingly.

Note 2 - Description of Plan

A. Organization

PERS administers a cost-sharing, multiple-employer defined benefit pension plan for units of state government, political subdivisions, community colleges, and school districts. The Plan contains 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, 2021, there were 900 participating employers.

PERS is administered in accordance with Oregon Revised Statutes (ORS) Chapter 238, Chapter 238A, and Internal Revenue Code Section 401(a). The Oregon Legislature has delegated authority to the Public Employees Retirement Board (Board) to administer and manage the System. All members of the Board are appointed by the governor and confirmed by the senate. The governor designates the chairperson. One member must be a public employer manager or a local elected official, one member must be a union-represented public employee or retiree, and three members must have experience in business management, pension management, or investing.

B. Plan Membership

Employer, retiree, and active and inactive member data as of June 30, 2021, is shown in Table 2 on the following page.

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

TABLE 2

Plan Membership as of June 30, 2021	Employers	Defined Benefit Plan Tier 1	Tier 2	OPSRP	Total	Postemployment Healthcare RHIA	RHIPA
Employers							
State Agencies	108						
Political Subdivisions	480						
Community Colleges	17						
School Districts	295						
Total Employers	**900**						
Inactive Members - General Service							
Retirees and beneficiaries currently receiving benefits		115,728	17,070	7,838	140,636	40,488	596
Alternate payees currently receiving benefits		2,726	126	7	2,859	n/a	n/a
Inactive Members - General Service Receiving Benefits		***118,454***	***17,196***	***7,845***	***143,495***	***40,488***	***596***
Inactive members eligible for, but not yet receiving benefits		6,588	5,265	7,218	19,071	12,080	n/a
Inactive members eligible for refund value of account only		2,191	7,614	n/a[1]	9,805	n/a	n/a
Inactive members not eligible for refund or retirement		0	0	17,291	17,291	n/a	n/a
Inactive Members - General Service Not Receiving Benefits		***8,779***	***12,879***	***24,509***	***46,167***	***12,080***	–
Total Inactive Members - General Service		**127,233**	**30,075**	**32,354**	**189,662**	**52,568**	**596**
Inactive Members - Police and Fire							
Retirees and beneficiaries currently receiving benefits		10,326	1,606	464	12,396	2,369	94
Alternate payees currently receiving benefits		577	30	2	609	n/a	n/a
Inactive Members - Police and Fire Receiving Benefits		***10,903***	***1,636***	***466***	***13,005***	***2,369***	***94***
Inactive members eligible for, but not yet receiving benefits		271	277	302	850	654	n/a
Inactive members eligible for refund value of account only		53	342	n/a[1]	395	n/a	n/a
Inactive members not eligible for refund or retirement		0	0	972	972	n/a	n/a
Inactive Members - Police and Fire Not Receiving Benefits		***324***	***619***	***1,274***	***2,217***	***654***	–
Total Inactive Members - Police and Fire		**11,227**	**2,255**	**1,740**	**15,222**	**3,023**	**94**
Active Members - General Service							
State Agencies		3,902	6,377	34,901	45,180	10,170	10,251
School Districts		5,477	12,005	54,327	71,809	17,423	n/a
Political Subdivisions		3,103	6,238	30,365	39,706	9,313	n/a
Community Colleges		489	1,165	5,731	7,385	1,648	n/a
Total Active Members - General Service		**12,971**	**25,785**	**125,324**	**164,080**	**38,554**	**10,251**
Active Members - Police and Fire							
State Agencies		446	1,335	4,379	6,160	1,778	1,749
School Districts		8	22	55	85	30	n/a
Political Subdivisions		565	2,175	7,018	9,758	2,740	n/a
Community Colleges		1	5	9	15	6	n/a
Total Active Members - Police and Fire		**1,020**	**3,537**	**11,461**	**16,018**	**4,554**	**1,749**
Grand Total Members		**152,451**	**61,652**	**170,879**	**384,982**	**98,699**	**12,690**

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

rate guarantee and has a higher normal retirement age of 60, compared to age 58 for Tier One.

As of June 30, 2021, there were 13,991 active plan members, 129,357 retired plan members or their beneficiaries currently receiving benefits, 9,103 inactive plan members entitled to but not yet receiving benefits, for a total of 152,451 Tier One members. For Tier Two members, as of June 30, 2021, there were 29,322 active plan members, 18,832 retired plan members or their beneficiaries currently receiving benefits, 13,498 inactive plan members entitled to but not yet receiving benefits, for a total of 61,652.

The 2003 Legislature enacted House Bill 2021, codified as ORS 238A, which created the Oregon Public Service Retirement Plan (OPSRP). OPSRP consists of the Pension Program and the Individual Account Program. Membership includes public employees hired on or after August 29, 2003.

As of June 30, 2021, there were 136,785 active plan members, 8,311 retired plan members or their beneficiaries currently receiving benefits, 7,520 inactive plan members entitled to but not yet receiving benefits, and 18,263 inactive plan members not eligible for refund or retirement, for a total of 170,879 OPSRP Pension Program members.

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

C. Plan Benefits

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

1. Pension Benefits

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

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

Under Senate Bill 1049, passed during the 2019 legislative session, the salary included in the determination of final average salary will be limited for all members beginning in 2021. The limit will be equal to $197,730 in 2021, and will be indexed with inflation in later years.

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

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

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

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

2. Death Benefits

Upon the death of a nonretired member, the beneficiary receives a lump-sum refund of the member's account balance (accumulated contributions and interest). In addition, the beneficiary receives 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.
- 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 occurred July 30, 2003, and earlier; $200 per month for deaths that occur after July 30, 2003.

3. Disability Benefits

A member with 10 or more years of creditable service who becomes disabled from other than duty-

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

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

4. Benefit Changes After Retirement

Members may choose to continue participation in their variable account after retiring and may experience annual benefit fluctuations caused by changes in the fair value of the underlying global equity investments of that account.

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

b. OPSRP Pension Program

1. Pension Benefits

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

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

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

Under Senate Bill 1049, passed during the 2019 legislative session, the salary included in the determination of final average salary will be limited for all members beginning in 2021. The limit will be equal to $197,730 in 2021, and will be indexed with inflation each year.

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

3. Disability Benefits

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

c. Individual Account Program

1. Benefit Terms

The IAP is an individual account-based program under the PERS tax-qualified governmental plan as defined under ORS 238A.400. An IAP member becomes vested on the date the employee account is established or on the date the rollover account was established. If the employer makes optional employer contributions for a member, the member becomes vested on the earliest of the following dates: the date the member completes 600 hours of service in each of five calendar years, the date the member reaches normal retirement age, the date the IAP is terminated, the date the active member becomes disabled, or the date the active member dies. The accounts fall under Internal Revenue Code Section 401(a).

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

2. Death Benefits

Upon the death of a nonretired 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. Postemployment Healthcare Benefits

ORS 238.420 established the Retirement Health Insurance Account (RHIA) and authorizes a payment of up to $60 from RHIA toward the monthly cost of health insurance for eligible PERS members. RHIA is a cost-sharing, multiple-employer OPEB plan for 900 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 costs, 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 fiscal year ended June 30, 2021, PERS employers contributed 0.06 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA benefits. No UAL rate was assigned for the RHIA program as it was funded at 126.4 percent as of December 31, 2017. Typically, PERS employers contribute an actuarially determined 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 10 years. These rates were based on the December 31, 2017, actuarial valuation. This is included in the employer contribution rates listed in Table 3 below.

Employer contributions are advance-funded on an actuarially determined basis. There is no inflation assumption for RHIA postemployment benefits because the payment amount is set by statute and is not adjusted for increases in healthcare costs. The number of inactive plan RHIA participants receiving benefits was 42,857 for the fiscal year ended June 30, 2021, and there were 43,108 active and 12,734 inactive members who meet the requirements to receive RHIA benefits when they retire.

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

A surviving spouse or dependent of a deceased

TABLE 3

Contribution Rate Summary[1]	Defined Benefit Pension							Postemployment Healthcare	
	PERS Defined Benefit Plan					OPSRP Pension Program		RHIA	RHIPA
	Pooled Employers			Non-Pooled Employers		All Employers		All Employers	State Agencies
	State Agencies[2]	State and Local Government Rate Pool[3]	School Pool[3]	Political Subdivisions[3,4]	Judiciary	General Service	Police and Fire		
Employee IAP	6.00 %	6.00 %	6.00 %	6.00 %	0.00 %	6.00 %	6.00 %	0.00 %	0.00 %
Employee Normal Cost	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00
Employer Normal Cost	15.71	15.83	13.79	16.92	17.43	8.40	13.03	0.06	0.12
Unfunded Actuarial Liability	4.63	10.43	16.73	7.03	3.04	1.45	1.45	0.00	0.27
Total Employer Contributions	20.34 %	26.26 %	30.52 %	23.95 %	20.47 %	9.85 %	14.48 %	0.06 %	0.39 %

[1]Group average rates shown were effective July 1, 2019 through June 30, 2021.
[2]A subcomponent of the State and Local Government Rate Pool; includes UAL payment rate offset.
[3]Does not include UAL payment rate offsets.
[4]Non-pooled Political Subdivisions are valued separately for the Defined Benefit Plan.

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

For the fiscal year ended June 30, 2021, state agencies contributed 0.06 and 0.12 percent of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA and RHIPA benefits, respectively. State agencies contributed 0.27 percent of all PERS-covered salaries to amortize the unfunded actuarial accrued liability of the RHIPA program over a fixed period with new unfunded actuarial accrued liabilities being amortized over 10 years. The first 10-year amortization base for outstanding RHIA and RHIPA UAL amounts began December 31, 2007. These rates were based on the December 31, 2017, actuarial valuation. This is included in the employer contribution rates listed in Table 3 on the previous page.

The number of inactive plan RHIPA participants receiving benefits was 690 for the fiscal year ended June 30, 2021. As of June 30, 2021, there were 12,000 active members who meet the requirements to receive RHIPA benefits when they retire. Inactive members are not eligible for these benefits. All subsidy payments from the RHIA and RHIPA are initially deposited in the Standard Retiree Health Insurance Account, as described in Note 8 on page 69, and subsequently remitted to the appropriate PERS health plan.

e. Deferred Compensation Plan

Deferred compensation plans are authorized under Internal Revenue Code Section 457. The Oregon Legislature enacted Chapter 179, Oregon Laws 1997, which established the Deferred Compensation Fund. ORS 243.400 to 243.507 established and provided for PERS to administer the state deferred compensation plan, known as the Oregon Savings Growth Plan (OSGP). As of June 30, 2021, the fair value of investments was $2,806.6 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, 2021, totaled $13.1 million. Of that amount, $10.4 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 20 investment options with varying degrees of market risk. Up to five financial institutions provide investment services in mutual funds for each investment option. A participant receives a blend of these mutual funds within the investment option. Participants direct the selection of investment options and also bear any market risk. The Oregon State Treasury has no liability for losses under the plan but does have the prudent investor responsibility of due care. Total membership as of June 30, 2021, was 29,315.

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 fiscal year ended June 30, 2021, averaged 0.19 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, 2021, there were 53,226 retirees and their dependents participating in the health insurance program.

PERS contracts with various contracted health plans (CHP) on a fully insured, conventionally funded insurance basis and remits premiums collected from participating members to the CHPs monthly. PERS contracted with Moda Health/Delta Dental on a fully insured insurance basis with some benefit programs under a conventionally funded arrangement and others under a minimum premium arrangement through February 2021. Under the minimum premium programs, a monthly minimum premium that represents administrative, stoploss, and other fixed costs is remitted. In addition, claims are invoiced on a weekly basis as Moda/Delta Dental makes payments for services delivered to covered PERS members. A settlement is required after calendar year end to reconcile that the claims payments did not exceed

the contractual maximum liability established during the annual renewal process.

Prior to January 1, 2019, Medicare Advantage was conventionally funded, while a minimum premium arrangement was in effect for Medicare Supplement, Medicare Supplement Rx, Medicare Advantage Rx, Non Medicare Medical and Rx, and Dental. Beginning January 1, 2019, Medicare Supplement and Medicare Supplement Rx became conventionally funded.

Beginning January 1, 2019, PERS and Moda agreed on a 24-month Medical Minimum Runout Period, in which the contractor administered all benefit claims with dates of service prior to December 31, 2018. The Moda Runout Period concluded on December 31, 2020, and accounts were settled and closed in February 2021. Delta Dental of Oregon is currently the only plan under a minimum premium arrangement.

As of June 30, 2021, with the conclusion of the Moda Medical Minimum Runout arrangement, there are no further SRHIA Reinsurance Reimbursement and Rebate receivables. The current estimate of incurred but not reported (IBNR) for Delta Dental of Oregon insurance claims is $830,000.

D. Contributions

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

a. Member Contributions

Beginning January 1, 2004, all member contributions, except for contributions by judge members, were placed in the OPSRP Individual Account Program (IAP). Prior to that date, all member contributions were credited to the Defined Benefit Pension Plan. Member contributions are set by statute at 6.0 or 7.0 percent of salary and are remitted by participating employers. The contributions are either deducted from member salaries or paid by the employers on the members behalf.

The Member Reserve, described in Note 6.A., represents accumulated member contributions and earnings allocations made prior to January 1, 2004, and subsequent earnings allocations less refunds and amounts transferred to reserves for retirements and disabilities. The IAP member accounts represent member contributions made on or after January 1, 2004, plus earnings allocations less disbursements for refunds, death benefits, and retirements.

Starting July 1, 2020, Senate Bill 1049 required a portion of member contributions to their IAP accounts to be redirected to the Defined Benefit fund. If the member earns more than $2,500 per month (increased to $2,535 per month on January 1, 2021) 0.75 percent (if OPSRP member) or 2.5 percent (if Tier One/Tier Two member) of the member's contributions that were previously contributed to the member's IAP now fund the new Employee Pension Stability Accounts (EPSA). The EPSA accounts will be used to fund the cost of future pension benefits without changing those benefits, which means reduced contributions to the member's IAP account. Members may elect to make voluntary IAP contributions equal to the amount redirected.

1. Employee Pension Stability Accounts

EPSA was created by the Oregon Legislature through Senate Bill 1049 (2019) to address the increasing cost of funding pension benefits. EPSA's function is to help pay for part of an applicable member's lifetime monthly pension benefit when they retire.

EPSA rules apply to most PERS members, but the EPSA redirect is only triggered when the member's gross pay in a month exceeds the monthly salary threshold, tied to the annual Consumer Price Index (All Urban Consumers, West Region). EPSA accounts are credited with investment earnings and losses annually, and have no guaranteed rate of return. Tier One and Tier Two EPSA accounts earn the Tier Two rate, and OPSRP EPSA accounts earn the OPRSP Plan rate. Tier One, Tier Two, and OPSRP members may have EPSA account balances eligible for withdrawal if the member stops working for all PERS-covered employers and/or all control groups under a PERS-covered employer and is not yet eligible for service retirement. OPSRP pension plan members who withdraw their EPSA and IAP will completely cancel membership in OPSRP, including forfeiting all accumulated retirement or service credit and potential retirement benefits. The redirect to EPSA remains in effect when the PERS system is less than 90 percent funded.

2. Target-Date Funds

The Oregon Investment Council, responsible for all PERS fund investments, approved the transition to a target-date fund investment methodology for all IAP accounts beginning January 1, 2018. This change in investment methodology reflects an investment best practice that will better protect participants from potential losses as they approach and enter retirement by gradually reducing investment risk as participants age. Participants are placed in target-date fund based on their year of birth. Investments in each fund will adjust over time to reduce investment risk — and potential losses in market downturns. As the participant moves toward retirement, the investments in the fund gradually shift, becoming more conservative to help protect against market fluctuations.

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 OPEB plans. Employer contribution rates during the period were based on the December 31, 2017, actuarial valuation, which became effective July 1, 2019. The state of Oregon and certain schools, community colleges, and political subdivisions have made supplemental unfunded actuarial liability payments, and their rates have been reduced. See the contribution rate summary provided in Table 3 on page 46. Effective January 1, 2020, Senate Bill 1049 requires employers to pay contributions on re-employed PERS retirees' salaries as if they were active members, excluding IAP (6 percent) contributions.

1. PERS Defined Benefit Plan (ORS 238)

Effective July 1, 2019, the pension rate for State Agencies was 20.34 percent, the Local Government Rate Pool 26.26 percent, schools 30.52 percent, and judiciary 20.47 percent of PERS-covered salaries. Political subdivisions that have not joined the State and Local Government Rate Pool had an average pension rate of 23.95 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. Oregon Laws 2001, Chapter 945, Section 13 authorized the establishment of the State and Local Government Rate Pool and the School Districts 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 while all education service districts, school districts, and charters schools were/are required to join the School Districts Pool. Participation in these pools was effective for the actuarial valuation period beginning January 1, 2002.

Based on the actuarial valuation as of December 31, 2017, the state agencies, the judiciary, schools, and political subdivisions all had increases in employer contribution rates on July 1, 2019. These rate changes are measured against the actual average rates paid since the last rate-setting valuation. Every two years, the PERS Board adjusts contributions so that, over time, those contributions will be sufficient to fund the benefits earned, if earnings follow assumptions.

2. OPSRP Pension Program (ORS 238A)

All PERS employers with OPSRP Pension Program members are actuarially pooled and share the same contribution rate. The OPSRP Pension Program employer rates effective July 1, 2019, through June 30, 2021, are 9.85 percent of covered salaries for General Service employees and 14.48 percent of covered salaries for Police and Fire employees. These rates increased from 9.29 percent of covered salaries for General Service and 14.06 percent of covered salaries for Police and Fire employees for the period July 1, 2017, through June 30, 2019. 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 accounts receivable balances reported in the Statement of Fiduciary Net Position. The Strunk and Eugene Accrual resulted from recalculating benefits for recipients who received overpayments based on the reallocation of 1999 earnings. Approximately 89 percent of these overpayments were received as of June 30, 2021; $4.0 million is expected to be collected within the next year.

TABLE 4

Accounts Receivable		June 30, 2021
Broker Receivables	$	975,199,964
Transition Liability		358,150,836
Interest and Dividend Receivables		132,640,598
Employer and Member Receivables		58,385,765
Strunk Eugene Accrual		4,728,848
Other		29,820,561
Total Accounts Receivable	**$**	**1,558,926,572**

B. Payables

Table 5 on page 50 disaggregates payable balances reported in the Statement 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 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

TABLE 5

Accounts Payable	June 30, 2021
Broker Payable	$ 1,586,381,246
Pension Roll	424,936,297
Investment Fees	14,348,824
Death Benefits	36,979,139
Compensated Absences	3,136,203
Services and Supplies	2,821,656
Other	3,548,449
Total Accounts Payable	**$ 2,072,151,814**

provide additional guidelines that vary from manager to manager.

A. Deposits

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

OSTF is separately audited by the Oregon Audits Division. The audited financial statements are available at https://sos.oregon.gov/audits/Documents/2021-27.pdf. OSTF investment risks are addressed in the notes to those financial statements.

Health Insurance Claims Fund of $3.2 million was held at U.S. Bank. The account is identified as Public Funds; therefore, any amount in the account above Federal Deposit Insurance Corporation (FDIC) was collateralized by the Public Funds Collateralization Program.

1. Custodial Credit Risk

Custodial credit risk for deposits is the risk that in the event of a bank failure, PERS' deposits may not be recovered. As noted above, the deposit and investment risks, including custodial risk, of the OSTF deposits are outlined in the OSTF financial statements. As of June 30, 2021, the carrying amount of PERS' deposits in OSTF totaled $2,434.0 million and the corresponding bank balance was $2,447.4 million. Investment managers' deposits with custodian banks consist of cash and cash equivalents that represent buying reserves. As of June 30, 2021, there was $1,697.5 million on deposit for the accounts of the OPERF investment managers.

TABLE 6

Depository Account	Bank Balance
Insured	$ 750,000
Oregon Short Term Fund	2,447,118,589
Health Insurance Claims Fund	2,960,411
IAP On Demand Deposit	3,789,480
Uninsured and Uncollateralized	1,697,298,384
Total Deposits	**$ 4,151,916,864**

TABLE 7

Investments as of June 30, 2021	Fair Value
U.S. Treasury Obligations	$ 6,193,339,465
U.S. Treasury Obligations - Strips	667,405,000
U.S. Treasury Obligations - TIPS	288,511,600
U.S. Federal Agency Mortgage Securities	625,356,090
U.S. Federal Agency Mortgage TBAs	400,906,468
U.S. Federal Agency Debt	165,937,311
U.S. Federal Agency Strips	12,280,281
International Debt Securities	739,326,524
Non-U.S. Government Debt Securities	2,056,803,965
Corporate Bonds	1,416,440,362
Bank Loans	1,269,048,588
Municipal Bonds	45,470,085
Collateralized Mortgage Obligations	409,814,859
Asset-Backed Securities	170,687,692
Guaranteed Investment Contracts[1]	281,278,893
Domestic Fixed Income Funds	1,019,229,413
Global Fixed Income Funds	816,074,546
Total Debt Securities	16,577,911,142
Derivatives in Asset Positions	221,022,546
Domestic Equity Securities	14,777,306,268
International Equity Securities	10,651,705,832
Domestic Equity Funds	4,347,887,794
Global Equity Funds	902,151,931
International Equity Funds	1,242,816,065
Target Date Funds	878,436,461
Oregon Savings Growth Plan - Self Directed	42,774,171
Total Public Equity	33,064,101,068
Real Estate and Real Estate Investment Trusts	10,151,288,539
Private Equity	25,725,638,086
Alternatives Portfolio	9,647,953,735
Opportunity Portfolio	2,125,974,636
Total PERS Investments - Fiduciary Funds	**$ 97,292,867,206**

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

As of June 30, 2021, IAP On Demand Deposit Account of $4.0 million was held at State Street Bank, the custodian of the IAP program third-party administrator. The balance on the deposit is insured by the FDIC up to the standard maximum deposit insurance amount. The balance in excess of the FDIC limit was uninsured and uncollateralized.

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, 2021, $209.9 million in cash and cash equivalents was exposed to foreign currency risk. The U.S. dollar balances of these deposits, organized by currency denomination, are presented in Table 12 on page 57.

3. Restricted Cash Equivalents

PERS' cash and cash equivalents as of June 30, 2021, include collateral of $360.0 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 lists the fair value of investments held by the state of Oregon for PERS as of June 30, 2021.

1. Fair Value Measurements

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

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

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

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

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

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

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

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

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

Exchange-traded derivatives, including futures, rights and warrants, that are actively traded are valued using quoted prices and are categorized in level 1. Derivative contract valuations, such as swaps and options, are modeled using observable pricing inputs and techniques that do not entail material subjectivity and are therefore categorized in level 2. Level 3 derivatives include securities valued at a price that has been determined by the investment manager's valuation committee.

Investments in real estate, other than real estate investment trusts which are generally valued based on an active market price and are categorized in level 1, have been valued based on the NAV per share (or its equivalent), as provided by the general partner. This type includes 68 commingled real estate funds, structured as limited partnerships, where the funds have a finite term. Distributions from the funds will be received as the underlying investments of the funds are liquidated. Liquidation is expected to take place during the 5 year period following the termination of the investment period which extends to 2035. Investments in real estate also include 15 joint ventures where the investments are expected to be held for the long term and generate cash flow that will represent a significant component of the total return. Real estate also includes investments in 12 open ended funds that permit quarterly redemption of shares, subject to certain requirements being met.

Private Equity consists of approximately 227 funds, organized as limited partnerships and limited liability companies, participating in diversified strategies including leveraged-buyouts, venture capital, growth equity, fund-of-funds, co-investments and special situations. The fair values of the private equity investments have been

determined using the NAV per share (or its equivalent) as provided by the general partner or managing member. These funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 12 to 14 years.

Alternatives Portfolio investments seek to provide diversification and inflation hedging characteristics to the fund and includes investments with a focus on infrastructure and natural resources. Alternatives Portfolio consists of 66 investments in commingled funds organized as limited partnerships and limited liability companies. The fair values of the investments have been determined using a NAV per share (or its equivalent) of the investments. For alternative infrastructure and natural resource investments, which includes 57 of the 66 funds, the funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 10 to 14 years. The remaining nine funds are open ended, permitting periodic redemption of shares, subject to certain requirements being met. They consist of eight funds investing in diversifying hedge strategies, and one fund investing in a risk parity strategy.

The Opportunity Portfolio includes strategies that fall outside of other asset classes and include 23 funds investing in a broad range of performing and distressed debt and debt related securities as well as royalties and insurance-based investments. The fair values of the investments have been determined using a NAV per share (or its equivalent) of the investments. For 17 of the 23 funds, the funds have a finite term. Distributions will be received as the underlying investments of the funds are liquidated, which is expected to occur over the next 7 to 10 years. The remaining six funds are open ended, permitting periodic redemption of shares.

TABLE 8

Investments and Derivative Instruments Measured at Fair Value

		Fair Value Measurements Using		
	6/30/2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level				
Debt Securities				
U.S. Treasury Obligations	$ 6,193,339,465	$ –	$ 6,193,339,465	$ –
U.S. Treasury Obligations - Strips	667,405,000	–	667,405,000	–
U.S. Treasury Obligations - TIPS	288,511,600	–	288,511,600	–
U.S. Federal Agency Mortgage Securities	625,356,090	–	625,356,090	–
U.S. Federal Agency Mortgage TBAs	400,906,468	–	400,663,780	242,688
U.S. Federal Agency Debt	165,937,311	–	165,937,311	–
U.S. Federal Agency Strips	12,280,281	–	12,280,281	–
Non-Government Debt Securities	2,056,803,965	–	2,056,803,965	–
Corporate Bonds	1,929,362,071	–	1,922,614,496	6,747,575
Bank Loans	1,336,328,375	–	1,119,906,544	216,421,831
Municipal Bonds	45,470,085	–	45,470,085	–
Collateralized Mortgage Obligations	422,534,326	–	422,534,326	–
Asset-Backed Securities	317,093,253	–	317,093,253	–
Domestic Fixed Income Funds	1,019,229,413	–	1,019,229,413	–
Global Fixed Income Funds	816,074,546	–	816,074,546	–
Total Debt Securities[1]	16,296,632,249	–	16,073,220,155	223,412,094
Public Equity				
Domestic Equity Securities	14,777,306,268	14,719,586,898	–	57,719,370
International Equity Securities	10,651,705,832	10,607,638,716	–	44,067,116
Domestic Equity Funds	4,347,887,794	–	4,347,887,794	–
Global Equity Funds	902,151,931	–	902,151,931	–
International Equity Funds	1,242,816,065	880,756,453	153,714,394	208,345,218
Target Date Funds	878,436,461	–	878,436,461	–
Oregon Savings Growth Plan - Self Directed	42,774,171	42,774,171	–	–
Total Public Equity	32,843,078,522	26,250,756,238	6,282,190,580	310,131,704
Real Estate Investment Trusts	634,801,611	634,801,612	–	–
Opportunity Open Ended Funds	123,209,400	123,209,400	–	–
Total Investments by Fair Value Level	**$ 49,897,721,782**	**$ 27,008,767,250**	**$ 22,355,410,735**	**$ 533,543,798**

TABLE 8 continues on the next page

TABLE 8 continuing from the previous page

Investments Measured at the Net Asset Value (NAV)				
Real Estate				
Real Estate Investments	$ 7,524,025,607			
Real Estate Open Ended Funds	1,992,461,321			
Total Real Estate	9,516,486,928			
Private Equity	25,725,638,086			
Alternatives Portfolio				
Alternative Diversifying Strategies	3,482,234,605			
Alternative Infrastructure	3,626,717,760			
Alternative Natural Resources	1,809,611,117			
Alternative Risk Parity	729,390,253			
Total Alternatives Portfolio	9,647,953,735			
Opportunity Portfolio				
Opportunity Private Investments	774,661,328			
Opportunity Open Ended Funds	1,228,103,908			
Total Opportunity Portfolio	2,002,765,236			
Total Investments Measured at the NAV	46,892,843,985			
Total Investments Measured at Fair Value	**$ 96,790,565,767**			
Investments Derivative Instruments				
Credit Default Swaps	$ 38,805,304	$ –	$ 38,805,304	$ –
Foreign Exchange Forwards	(85,462,765)	–	(85,462,765)	–
Forwards	152,383,729	–	–	152,383,729
Interest Rate Swaps	22,804,190	–	22,804,190	–
Options	6,596,754	268,450	6,328,304	–
Rights and Warrants	328,296	211,923	–	116,373
Total Return Swaps	104,272	–	104,272	–
Total Assets	135,559,780	480,373	(17,420,695)	152,500,102
Credit Default Swaps	(1,945,264)	–	(1,945,264)	–
Foreign Exchange Forwards	221,813,512	–	221,813,512	–
Interest Rate Swaps	(13,936,342)	–	(13,936,342)	–
Options	(5,846,237)	–	(5,846,237)	–
Total Return Swaps	(119,049)	–	(119,049)	–
Total Liabilities	199,966,620	–	199,966,620	–
Total Investments Derivative Instruments	**$ 335,526,400**	**$ 480,373**	**$ 182,545,925**	**$ 152,500,102**
Invested Securities Lending Collateral				
Asset-Backed Securities	$ 50,170,580	$ –	$ 50,170,580	$ –
Treasury Bills	29,999,813	–	29,999,813	–
Negotiable Certificates of Deposit	125,712,004	–	125,712,004	–
Commercial Paper	136,937,178	–	136,937,178	–
Corporate Bonds	61,500,000	–	61,500,000	–
Repurchase Agreements	220,000,000	–	220,000,000	–
Total Invested Securities Lending Collateral[2]	**$ 624,319,575**	**$ –**	**$ 624,319,575**	**$ –**

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

[2] For OSTF's participation in securities lending activity of $1,205,893, refer to their audited financial statements at: https://sos.oregon.gov/audits/Documents/2021-27.pdf

TABLE 9

Investments Measured at the Net Asset Value

	Fair Value	Unfunded Commitments*	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Real Estate				
Real Estate Investments	$ 7,524,025,607	$ 2,741,357,372	n/a	n/a
Real Estate Open Ended Funds	1,992,461,321	258,399,601	Quarterly	15 - 90 days
Private Equity	25,725,638,086	8,696,202,718	n/a	n/a
Alternatives Portfolio				
Alternative Diversifying Strategies	3,482,234,605	-	Monthly	3- 90 days
Alternative Infrastructure	3,626,717,760	2,241,224,149	n/a	n/a
Alternative Natural Resources	1,809,611,117	1,343,228,327	n/a	n/a
Alternative Risk Parity	729,390,253	-	Monthly	5 days
Opportunity Portfolio				
Opportunity Private Investments	774,661,328	1,093,906,016	n/a	n/a
Opportunity Open Ended Funds	1,228,103,908	294,954,570	Monthly, Qtrly	5-90 days
Total	**$ 46,892,843,985**	**$ 16,669,272,753**		

* Excludes unfunded commitments associated with investments included in the fair value hierarchy (Levels 1, 2, and 3) and new commitments not yet funded at 6/30/2021.

PERS has recurring fair value measurements as of June 30, 2021 as shown in Table 8 on page 53. Disclosures regarding redemption and investments valued at the NAV per share (or its equivalent), including Unfunded Commitments, are presented in Table 9 above.

2. Rate of Return

For the fiscal year ended June 30, 2021, the annual money-weighted rate of return on defined benefit pension plan investments, net of defined benefit pension plan investment expenses, was 26.17 percent. The annual money-weighted rates of return on the other postemployment healthcare benefits (OPEB) investments, net of OPEB investment expenses, were 26.26 percent for the Retirement Health Insurance Account (RHIA) and 26.60 percent for the Retiree Health Insurance Premium Account (RHIPA). The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the timing of cash flows and the changing amounts actually invested.

3. Investment Concentrations

As of June 30, 2021, there were no organizations that represent 5 percent or more of the pension plan's fiduciary net position or total investments.

4. Credit Risk Debt Securities

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. OIC has no formal policy regarding credit risk. As of June 30, 2021, the fair value of below grade investments, excluding unrated securities, is $1,471.3 million, or 15.88 percent, of total securities subject to credit risk and 8.87 percent of total debt securities. The weighted quality rating average is AA-. Unrated securities include $352.6 million in bank loans, $1,399.3 million in domestic and global fixed income funds, $281.3 million in guaranteed investment contracts, and $447.9 million in other debt securities. Unrated federal agency securities include $158.2 million in Federal Home Loan Mortgage Corporation (FHLMC), $597.5 million in Federal National Mortgage Association (FNMA), and $163.0 million in other federal agency securities. These federal agency securities are not rated by the credit rating agencies as these are implicitly guaranteed by the U.S. government. Table 10 on the next page details the quality ratings for credit risk debt securities as of June 30, 2021.

5. Custodial Credit Risk

Custodial credit risk for investments is the risk that in the event of a failure of the counterparty, PERS will not be able to recover the value of the investments or collateral securities that are in the possession of an outside party. OIC has no formal policy regarding the holding of securities by a custodian or counterparty. As of June 30, 2021, no investments were exposed to custodial credit risk.

6. Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of

TABLE 10

Schedule of Credit Risk at June 30, 2021

Quality Rating	Fair Value
AAA	$ 1,213,220,884
AA	845,626,907
A	837,823,594
BBB	1,497,071,850
BB	258,225,482
B	904,947,319
CCC	301,700,360
CC	6,414,644
Not Rated	2,481,189,834
Not Rated - U.S. Agency[1]	918,774,962
Total Subject to Credit Risk	**9,264,995,836**
U.S. Government Guaranteed Securities	7,312,915,306
Total Debt Securities	**$ 16,577,911,142**

[1] Federal Agency securities are not rated by the credit rating agencies as they carry an implicit guarantee of the U.S. Government. See Credit Risk Debt Securities note disclosure on the previous page for more detail.

TABLE 11

Schedule of Interest Rate Risk - Effective Duration at June 30, 2021

Investments	Fair Value	Effective Weighted Duration Rate (in years)
U.S. Treasury Obligations	$ 6,193,339,465	7.99
U.S. Treasury Obligations - Strips	667,405,000	0.50
U.S. Treasury Obligations - TIPS	288,511,600	7.16
U.S. Federal Agency Mortgage Securities	625,356,090	3.59
U.S. Federal Agency Mortgage TBAs	400,906,468	4.98
U.S. Federal Agency Debt	165,937,311	5.62
U.S. Federal Agency Strips	12,280,281	6.99
International Debt Securities	732,146,414	3.91
Non-U.S. Government Debt Securities	1,995,090,634	7.51
Corporate Bonds	1,416,405,286	7.70
Bank Loans	1,253,229,641	0.19
Municipal Bonds	45,470,085	9.08
Collateralized Mortgage Obligations	409,814,859	1.40
Asset-Backed Securities	170,687,692	1.87
Domestic Fixed Income Funds	1,019,229,413	4.03
Global Fixed Income Funds	816,074,546	6.57
No Effective Duration:		
International Debt Securities	7,180,110	N/A
Non-U.S. Government Debt Securities	61,713,331	N/A
Corporate Bonds	35,076	N/A
Bank Loans	15,818,947	N/A
Guaranteed Investment Contracts	281,278,893	N/A
Total Debt Securities	**16,577,911,142**	
Cash Equivalent - Mutual Funds - STIF	1,351,761,963	48 Days[1]
Cash Equivalent - Oregon Short Term Fund	2,039,708,848	224Days[1]
Total Subject to Interest Rate Risk	**$ 19,969,381,953**	

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

an investment. This risk is managed within the portfolio using the effective duration methodology. As of June 30, 2021, the weighted average duration of PERS' fixed income portfolio was 4.86 years.

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

No individual fixed income investment manager's portfolio was outside the policy guidelines as of June 30, 2021. Table 11 on the previous page shows the investments by type, amount, and effective weighted duration.

At June 30, 2021, PERS held approximately $1,035.2 million in debt instruments backed by pooled mortgages, Collateralized Mortgage Obligations (CMOs), or fixed-rate mortgages. These securities represent a stream of principal and interest payments from underlying mortgages. Assets with these characteristics are susceptible to prepayment by the mortgage holders which may result in a decrease in total interest realized. The value of these securities can be volatile as interest rates fluctuate. Additionally, the risk of default exists and collateral held may potentially be insufficient to cover the principal due. PERS also held approximately $400.9 million in To-Be-Announced (TBA) federal agency-issued mortgage pools. An additional $170.7 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. As of June 30, 2021, approximately 9.94 percent of the debt investment portfolio was invested in non-dollar denominated securities. Policies for PERS' portfolio do not limit non-dollar denominated investments. PERS utilizes a currency overlay manager to reduce risk through offsetting investments in the developed foreign currency market for international equity portfolios. See Table 12 on the next page.

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, 2021, the OPERF had $3,862.3 million in commitments to purchase real estate investments, and $10,351.6 million in commitments to purchase private equity investments, which includes $6,586.4 million in recallable distributions. There were $4,684.5 million in commitments to purchase alternative portfolio, which includes $932.9 million in recallable distributions. Additionally, there were $1,388.9 million in commitments to purchase opportunity portfolio investments, which includes $445.1 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 fair 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 caused by 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.

The maturities of investments made with cash collateral did not generally match the maturities of the securities loaned. Because the securities loaned are callable on demand by either the lender or borrower, the life of the loans at June 30, 2021, is effectively one day. On June 30, 2021, OPERF had no credit risk exposure to borrowers because the amounts OPERF owes borrowers exceeds the amounts borrowers owe OPERF.

On June 30, 2021, the fair value of cash collateral received and invested cash collateral were $638.2 million and $638.2 million, respectively. The cumulative unrealized loss in invested cash collateral of $51,000 has been recognized in

TABLE 12

Currency Exposures by Asset Class in US Dollar Equivalents as of June 30, 2021

Currency	Cash and Cash Equivalents	Debt Securities	Public Equity	Derivatives in Asset Positions	Real Estate	Alternatives Portfolio	Total
Argentine peso	$ 3,479	$ –	$ –	$ –	$ –	$ –	$ 3,479
Australian dollar	6,275,498	43,743,039	375,052,254	-	4,245,544	-	429,316,335
Brazilian real	2,537,944	346,418	159,279,611	-	-	-	162,163,973
Canadian dollar	9,372,611	27,431,592	524,970,596	1,499	8,717,457	-	570,493,755
Chilean peso	906,659	-	8,268,761	-	-	-	9,175,420
Chinese yuan renminbi	36,233,114	24,849,823	247,089,242	-	-	-	308,172,179
Colombian peso	19,232	1,143,281	579,827	-	-	-	1,742,340
Czech koruna	9,480	-	1,065,622	-	-	-	1,075,102
Danish krone	167,054	2,680,264	268,130,500	-	-	-	270,977,818
Egyptian pound	2,232	-	3,818,304	-	-	-	3,820,536
Euro	55,374,702	730,648,588	2,039,934,520	19,109,778	743,016	2,528,432,113	5,374,242,717
Hong Kong dollar	9,708,309	-	700,873,540	21,052	4,406,249	-	715,009,150
Hungarian forint	152,845	742,973	10,689,009	-	-	-	11,584,827
Indian rupee	1,317,000	229	227,030,725	-	-	-	228,347,954
Indonesian rupiah	408,914	12,102,110	24,753,508	-	-	-	37,264,532
Israeli shekel	319,020	13,229,652	68,445,254	-	-	-	81,993,926
Japanese yen	19,618,312	432,207,848	1,509,031,133	233,741	2,862,197	-	1,963,953,231
Kenya shilling	-	-	3,931,464	-	-	-	3,931,464
Kuwaiti dinar	22,002	-	4,283,966	-	-	-	4,305,968
Malaysian ringgit	1,042,337	13,391,785	37,128,325	-	-	-	51,562,447
Mexican peso	1,918,319	29,730,832	71,921,660	20,063,429	14,811,646	-	138,445,886
New Taiwan dollar	1,178,117	-	373,946,526	-	-	-	375,124,643
New Zealand dollar	348,425	3,658,320	12,344,675	-	-	-	16,351,420
Nigerian naira	657,586	-	4,856,163	-	-	-	5,513,749
Norwegian krone	210,076	655,451	78,064,853	398,053	-	-	79,328,433
Pakistani rupee	148,508	-	4,732,526	-	-	-	4,881,034
Peruvian nuevo sol	2,336	7,470,590	9,393	-	-	-	7,482,319
Philippine peso	192,445	-	12,573,743	-	-	-	12,766,188
Polish zloty	301,775	1,926,082	24,229,265	-	-	-	26,457,122
Pound sterling	8,976,714	278,475,942	1,509,342,783	5,895	84,312	-	1,796,885,646
Qatar riyal	42,345	-	22,615,932	-	-	-	22,658,277
Romanian leu	-	754,902	2,411,951	-	-	-	3,166,853
Russian ruble	813,537	16,672,306	59,008,622	-	-	-	76,494,465
Saudi Arabian riyal	440,077	-	82,766,117	-	156,819	-	83,363,013
Singapore dollar	1,757,671	-	70,837,381	14,549	14,264,454	-	86,874,055
South African rand	10,078,195	2,740,208	153,758,795	-	941,722	-	167,518,920
South Korean won	23,735,435	-	544,668,340	-	21,996	-	568,425,771
Swedish krona	13,582,156	2,568,356	302,129,272	-	-	-	318,279,784
Swiss franc	1,079,939	490,767	582,040,162	-	-	-	583,610,868
Thailand baht	502,407	-	31,521,108	78,579	448,759	-	32,550,853
Tunisia dinar	-	-	-	17	-	-	17
Turkish lira	147,416	-	13,818,830	-	-	-	13,966,246
United Arab Emirates dirham	33,569	-	11,330,123	-	-	-	11,363,692
Vietnamese dong	217,811	-	8,573,488	-	-	-	8,791,299
Zimbabwe dollar	2	-	-	-	-	-	2
Total Subject to Foreign Currency Risk	$ 209,855,605	$ 1,647,661,358	$ 10,191,857,869	$ 39,926,592	$ 51,704,171	$ 2,528,432,113	$ 14,669,437,708

securities lending income in the Statement of Changes in Fiduciary Net Position in the period in which the gain or losses occurred. For the fiscal year ended June 30, 2021, total income from securities lending activity was $7.1 million, and total expenses for the period were $1.8 million for a net gain of $5.3 million.

OSTF also participates in securities lending activity. OPERF receives an allocated portion of this activity based on its deposits in OSTF. As of June 30, 2021, OPERF's allocated portion of cash collateral received and invested cash collateral were $1.2 million and $1.2 million, respectively.

Cash collateral received for OSTF securities lent is invested in securities lending collateral pools and is not exposed to custodial risk. For more information on OSTF's participation in securities lending activity, refer to their audited financial statements at: https://sos.oregon.gov/audits/Documents/2021-27.pdf.

Table 13 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, 2021, is shown in Table 14. Securities lending collateral subject to interest rate risk as of June 30, 2021, is shown in Table 15.

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.

TABLE 13

Securities Lending as of June 30, 2021

Investment Type	Securities on Loan at Fair Value	Cash and Securities Collateral Received	Investments of Cash Collateral at Fair Value
U.S. Treasury Securities	$ 843,300,421	$ 859,803,495	$ 69,374,133
U.S. Agency Securities	198,751,211	202,629,420	84,623,135
Domestic Equity Securities	506,268,470	519,719,148	332,559,892
Domestic Debt Securities	88,709,241	90,410,330	120,886,626
International Equity Securities	100,429,922	105,020,169	30,718,313
Allocation from Oregon Short Term Fund	5,404,622	5,514,971	1,205,893
Total	**$ 1,742,863,887**	**$ 1,783,097,533**	**$ 639,367,992**

Risks inherent with derivatives are managed through investment management's adherence to contractual and policy prescribed terms that are consistent with OPERF's investing objectives.

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

Table 16 on page 60 presents the fair value amounts, the related net appreciation/(depreciation) in fair value amounts, and the notional amounts of derivative instruments outstanding as of June 30, 2021.

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 a reporting period. Risks associated with such contracts include movement in the value of foreign currencies and the ability of the counterparty to perform.

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

A swap is an agreement that obligates two parties to exchange a series of cash flows or the net value of cash flows at specified intervals based upon, or calculated by, reference to changes in specified prices or rates for a specified amount of an underlying asset. Swaps are privately negotiated contracts with customized terms and are transacted in over-the-counter markets. OPERF held various types of swaps including credit default, interest rate, and total return swaps. The payment flows are usually netted against each other, with the difference being paid by one party or another. In addition, collateral may be pledged or received by OPERF in accordance with the terms of the respective swap agreements to provide value and recourse to OPERF or its counterparties. Swaps are subject to general market risk, liquidity risk, credit risk, interest rate risk, and the risk that the counterparty may fail to perform.

An option is an instrument that gives one party the right, but not the obligation, to buy or sell an underlying asset from or to another party at a fixed price over a specified period of time. In writing an option, OPERF bears the market risk of an unfavorable change in the price of the underlying investment of the written option. Exercise of an option written by OPERF could result in OPERF selling or buying an asset at a price different from the current fair 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 predetermined date. A warrant provides the holder the right, but not the obligation,

TABLE 14

Securities Lending Invested Cash Collateral Subject to Credit Risk as of June 30, 2021

Quality Rating		Fair Value
AAA	$	78,729,098
AA[1]		91,007,733
A		258,141,449
B		1,441,295
Total Subject to Credit Risk		**429,319,575**
U.S. Government Guaranteed Repurchase Agreements		195,000,000
Allocation from Oregon Short Term Fund		1,205,893
Cash		13,842,524
Total Securities Lending Invested Cash Collateral	**$**	**639,367,992**

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

TABLE 15

Securities Lending Invested Cash Collateral Subject to Interest Rate Risk as of June 30, 2021

Security Type		Fair Value	Effective Weighted Duration Rate (in days) [1]
Asset-Backed Securities	$	50,170,580	20
Negotiable Certificates of Deposit		125,712,004	96
Corporate Bonds		61,500,000	41
Commercial Paper		136,937,178	93
Treasury Bills		29,999,813	5
Repurchase Agreements		25,000,000	2
Total Subject to Interest Rate Risk		429,319,575	**70**
U.S. Government Guaranteed Repurchase Agreements		195,000,000	
Allocation from Oregon Short Term Fund		1,205,893	
Cash		13,842,524	
Total Securities Lending Invested Cash Collateral	**$**	**639,367,992**	

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

TABLE 16

Derivative Instruments as of June 30, 2021

Investment Derivatives	Net Appreciation/ (Depreciation) in Fair Value of Investments [1,3]	Classification	Fair Value	Notional Value [2]
Commodity Futures Long	$ 60,961,469	Public Equity	$ –	$ 77,695,245
Commodity Futures Short	(4,870,955)	Public Equity	–	(1,909)
Credit Default Swaps Bought	(14,476,229)	Public Equity	748,299	62,860,000
Credit Default Swaps Written	18,866,475	Public Equity	36,111,741	847,869,136
Equity Options Written	22,247	Public Equity	–	–
Fixed Income Futures Long	(125,602,128)	Public Equity	–	6,376,443,074
Fixed Income Futures Short	19,778,259	Public Equity	–	(389,393,390)
Fixed Income Options Bought	(3,127,266)	Public Equity	6,268,455	365,649,463
Fixed Income Options Written	8,461,413	Public Equity	(5,398,002)	(723,273,354)
Foreign Currency Options Bought	(219,965)	Public Equity	40,248	16,183,000
Foreign Currency Options Written	717,488	Public Equity	(53,928)	(4,205,000)
Foreign Exchange Forwards	(120,493,174)	Receivables/Payables	136,350,747	24,367,383,729
Futures Options Bought	(710,540)	Public Equity	288,050	1,895,000
Futures Options Written	3,298,942	Public Equity	(394,306)	(1,279,000)
Index Futures Long	213,283,123	Public Equity	–	58,950,386
Index Futures Short	(284,331,633)	Public Equity	–	(10,878,030)
Pay Fixed Interest Rate Swaps	11,772,981	Public Equity	11,515,986	716,709,033
Receive Fixed Interest Rate Swaps	(20,168,404)	Public Equity	(2,648,138)	842,423,442
Rights	330,962	Public Equity	145,410	246,425
Total Return Swaps Bond	(7,068,796)	Public Equity	390,519	39,503,622
Total Return Swaps Equity	37,071,696	Public Equity	(405,296)	(219,527,737)
Warrants	619,815	Public Equity	182,886	1,232,700
Total	**$ (205,884,220)**		**$ 183,142,671**	**$ 32,426,485,835**

[1] Negative values (in brackets) refer to losses.

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

[3] Excludes futures margin payments.

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 because of existing investments and are subject to general market risk and liquidity risk.

Counterparty Credit Risk

Table 17 on page 61 presents a summary of counterparty credit ratings relating to derivative instruments in asset positions, as of June 30, 2021.

Interest Rate Risk

As of June 30, 2021, OPERF is exposed to interest rate risk on its various swap arrangements and options. Table 18 on page 61 presents a segmented time schedule of those instruments, and Table 19, on pages 62 through 65, shows a schedule of derivative instruments that were highly sensitive to interest rate changes.

Foreign Currency Risk

OPERF is exposed to foreign currency risk on its derivative instruments. Table 20 on page 65 presents a summary of derivative instruments subject to foreign currency risk as of June 30, 2021.

Note 5 - Capital Assets Used in Plan Operations

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

Data processing hardware, furniture, and equipment are recorded at cost. These are items that are not consumed in the normal course of operations, have a useful life of more than one year, and are valued at $5,000 or more. Depreciation is computed using the straight-line method over the assets' estimated useful lives. Useful lives range from 3 to 10 years.

TABLE 17

Derivative Instruments Subject to Counterparty Credit Risk as of June 30, 2021

Counterparty Name	Percentage of Net Exposure	S&P Rating	Fitch Rating	Moody's Rating
Morgan Stanley Capital Services Inc.	11.22%	BBB+	A	A1
UBS AG	9.49%	A+	AA-	Aa3
Citibank N.A.	7.53%	A+	A+	Aa3
JP Morgan Chase Bank N.A. London	7.10%	A+	AA	Aa2
NatWest Markets PLC	6.48%	A-	A+	A3
State Street Bank London	6.12%	A	AA-	A1
Standard Chartered Bank	4.76%	A	A+	A1
The Bank of New York Mellon	4.47%	AA-	AA	Aa2
JP Morgan ICE	4.21%	A-	AA-	A2
Goldman Sachs Bank USA	3.23%	BBB+	A	A2
Goldman Sachs ICE	2.88%	BBB+	A	A2
Credit Suisse FOB ICE	2.87%	A+	A	Aa3
Société Générale	2.79%	A	A-	A1
Bank of New York	2.65%	A	AA-	A1
JP Morgan Chase Bank N.A.	2.44%	A+	AA	Aa2
Toronto Dominion Bank	2.16%	AA-	AA-	Aa3
State Street Bank and Trust Company	2.12%	AA-	AA	Aa3
Westpac Banking Corporation	1.94%	AA-	A+	Aa3
Credit Agricole CIB	1.86%	A+	A+	Aa3
HSBC Bank USA	1.58%	A+	AA-	Aa3
Morgan Stanley CME	1.40%	BBB+	A	A1
Morgan Stanley and Co. International PLC	1.34%	BBB+	A	A1
HSBC Bank PLC	1.30%	A-	A+	A3
JP Morgan Chase Bank N.A.	1.30%	A+	AA	Aa2
Goldman Sachs International	1.06%	A+	A+	A1
Royal Bank of Canada	0.94%	AA-	AA	A2
Bank of Montreal	0.84%	A+	AA-	Aa2
Morgan Stanley LCH	0.81%	BBB+	A	A1
JP Morgan CME	0.76%	A-	AA-	A2
Barclays Bank CME	0.66%	A	A+	A1
BNP Paribas SA	0.57%	A+	A+	Aa3
Morgan Stanley ICE	0.38%	BBB+	A	A1
Bank of America, N.A.	0.25%	A+	AA	Aa2
JP Morgan LCH	0.16%	A-	AA-	A2
Morgan Stanley Co Incorporated	0.15%	BBB+	A	A1
Barclays Bank PLC Wholesale	0.11%	A	A+	A1
Australia and New Zealand Banking Group	0.07%	AA-	A+	Aa3
Deutsche Bank AG	0.04%	BBB+	BBB	A3
J P Morgan Securities Inc.	0.03%	A-	AA-	A2
Morgan Stanley and Co Inc.	0.01%	BBB+	A	A1
	100.00%			

TABLE 18

Derivative Instruments Subject to Interest Rate Risk as of June 30, 2021

		Investment Maturities (in years)			
Investment Type	**Fair Value**	**Less Than 1**	**1 - 5**	**6 - 10**	**More than 10**
Credit Default Swaps Bought	$ 748,299	$ (118,230)	$ (342,150)	$ –	$ 1,208,679
Credit Default Swaps Written	36,111,741	–	37,569,586	–	(1,457,845)
Fixed Income Options Bought	6,268,455	1,147,081	3,786,250	1,162,734	172,390
Fixed Income Options Written	(5,398,002)	(3,047,829)	(1,737,829)	(612,344)	-
Pay Fixed Interest Rate Swaps	11,515,986	-	(435,824)	5,812,264	6,139,546
Receive Fixed Interest Rate Swaps	(2,648,138)	(136,607)	(1,852,315)	(408,121)	(251,095)
Total Return Swaps Bond	390,519	390,519	–	–	–
Total Return Swaps Equity	(405,296)	(405,296)	–	–	–
Total	**$ 46,583,564**	**$ (2,170,362)**	**$ 36,987,718**	**$ 5,954,533**	**$ 5,811,675**

TABLE 19

Derivative Instruments Highly Sensitive to Interest Rate Changes as of June 30, 2021

Investment Type	Reference Rate	Fair Value	Notional Value
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.00000%	$ 692,107	$ 18,500,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.25000%	919,421	7,200,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-month GBP UKRPI, Pay Fixed 3.05050%	313,526	1,519,595
Pay Fixed Interest Rate Swaps	Receive Variable 1-month GBP UKRPI, Pay Fixed 3.39670%	96,766	2,348,465
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.25000%	77,534	600,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.75000%	3,056,217	46,400,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month AUD BBSW, Pay Fixed 1.00000%	145,949	2,627,626
Pay Fixed Interest Rate Swaps	Receive Variable 6-month CHF LIBOR, Pay Fixed 0.50000%	-	17,958,565
Pay Fixed Interest Rate Swaps	Receive Variable 1-month US CPI, Pay Fixed 2.32950%	14,220	500,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.25000%	48,554	42,000,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 0.00000%	61,024	1,185,901
Pay Fixed Interest Rate Swaps	Receive Variable 1-month US CPI, Pay Fixed 2.27400%	337,890	9,300,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-month US CPI, Pay Fixed 2.34500%	31,351	1,200,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month NOK NIBOR, Pay Fixed 1.50000%	(10,898)	4,137,033
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 0.50000%	(10,387)	1,897,441
Pay Fixed Interest Rate Swaps	Receive Variable 12-month GBP SONIA, Pay Fixed 0.75000%	44,009	2,072,175
Pay Fixed Interest Rate Swaps	Receive Variable 6-month AUD BBSW, Pay Fixed 1.75000%	(97,327)	6,306,302
Pay Fixed Interest Rate Swaps	Receive Variable 6-month AUD BBSW, Pay Fixed 0.50000%	13,576	675,675
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 0.20500%	(4,622)	1,423,081
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 0.19000%	(1,843)	1,067,311
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.94000%	(34,896)	900,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 0.25000%	-	19,211,590
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.00000%	(68,818)	1,300,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.93500%	(30,043)	800,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.96800%	(41,028)	900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.25000%	(40,550)	5,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.37800%	(27,653)	880,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.77050%	(656,098)	50,845,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.70900%	12,683	830,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.66650%	11,680	640,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.64500%	3,730	140,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.16500%	-	70,537,818
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.09750%	(101)	1,120,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.99800%	(4,215)	1,050,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.13650%	(7,631)	2,300,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.76350%	(359,827)	9,910,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 0.18500%	(10,028)	640,386
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.82000%	370	3,600,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.90000%	1,360,858	6,780,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.62550%	23,682	5,340,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.76000%	407,035	5,070,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.76500%	414,306	5,190,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.77000%	184,322	2,320,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.60000%	89,700	2,790,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.64800%	136,422	2,180,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.81000%	1,655,688	7,360,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.08950%	155,685	860,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.13550%	146,186	860,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-month FEDL, Pay Fixed 0.26000%	2,219,165	62,100,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.65200%	262,249	3,880,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.67200%	250,462	3,860,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.88100%	213,944	890,000

TABLE 19 continues on the next page

TABLE 19 continuing from the previous page

Investment Type	Reference Rate	Fair Value	Notional Value
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.50200%	180,646	4,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.97250%	95,219	740,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.50100%	37,731	1,020,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.05800%	236,125	1,367,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.20000%	1,201,426	9,118,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month SOFR, Pay Fixed 0.90710%	31,081	217,085
Pay Fixed Interest Rate Swaps	Receive Variable 3-month SOFR, Pay Fixed 0.84356%	13,001	122,523
Pay Fixed Interest Rate Swaps	Receive Variable 3-month SOFR, Pay Fixed 0.53345%	32,237	577,223
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.22500%	324,701	2,896,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.20000%	719,824	6,125,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.95650%	79,049	1,950,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.74400%	(119,582)	3,980,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.92000%	97,278	2,185,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.05450%	65,163	1,960,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.60000%	111,851	3,597,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.84458%	119,200	6,350,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.59400%	(4,361)	2,205,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.62100%	(4,996)	1,102,500
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.54750%	1,257	1,890,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.00000%	(1,282,151)	23,150,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month GBP UKRPI, Pay Fixed 3.58250%	132,497	9,462,933
Pay Fixed Interest Rate Swaps	Receive Variable 12-month US CPI, Pay Fixed 2.31500%	369,067	12,460,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.27082%	(38,469)	6,130,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.00000%	(39,793)	646,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.05000%	(143,372)	1,942,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.71000%	(2,753)	3,180,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.25000%	(285,287)	46,596,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.78750%	(842,873)	6,689,500
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.35000%	(414,830)	32,928,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.58336%	(116,820)	7,420,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.28500%	(8,718)	2,850,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.30750%	(190)	50,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.67350%	(9,054)	410,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month Euro EURIBOR, Pay Fixed 0.44000%	(20,279)	2,063,467
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.58964%	(120,678)	7,400,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.67500%	(87,542)	4,550,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 2.10000%	(382,371)	5,870,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month US CPI, Pay Fixed 2.48300%	11,344	3,135,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.88989%	(38,784)	1,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 1.365500%	(3,330)	890,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.72900%	1,874	7,010,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.74200%	303	3,510,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-month GBP UKRPI, Pay Fixed 3.63000%	12,777	4,703,838
Pay Fixed Interest Rate Swaps	Receive Variable 12-month US CPI, Pay Fixed 2.43000%	43,155	6,055,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-month SOFR, Pay Fixed 1.72875%	(427,968)	9,996,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-month LIBOR, Pay Fixed 0.76650%	(965)	3,505,000
Subtotal - Pay Fixed Interest Rate Swaps		11,515,986	716,709,033
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00000%, Pay Variable 3-month LIBOR	230,984	40,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000%, Pay Variable 6-month CHF LIBOR	(35,247)	17,958,565
Receive Fixed Interest Rate Swaps	Receive Fixed 3.21710%, Pay Variable 1-month GBP UKRPI	(447,159)	3,868,060
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000%, Pay Variable 3-month LIBOR	(13,978)	630,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00000%, Pay Variable 3-month CAD CDOR	(174,874)	8,237,099
Receive Fixed Interest Rate Swaps	Receive Fixed 1.25000%, Pay Variable 3-month CAD CDOR	(144,868)	2,664,944
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000%, Pay Variable 6-month LIBOR	(34,848)	4,414,812
Receive Fixed Interest Rate Swaps	Receive Fixed 3.70000%, Pay Variable 0-month Brazil BRCDI	(145,763)	20,945,226
Receive Fixed Interest Rate Swaps	Receive Fixed 1.90000%, Pay Variable 6-month Euro EURIBOR	46,257	2,161,484

TABLE 19 continues on the next page

TABLE 19 continuing from the previous page

Investment Type	Reference Rate	Fair Value	Notional Value
Receive Fixed Interest Rate Swaps	Receive Fixed 0.25000%, Pay Variable 6-month Euro EURIBOR	(20,810)	19,211,590
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000%, Pay Variable 6-month Euro EURIBOR	(160,681)	12,570,546
Receive Fixed Interest Rate Swaps	Receive Fixed 0.75000%, Pay Variable 12-month GBP SONIA	8,144	4,144,350
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000%, Pay Variable 12-month GBP SONIA	(43)	11,327,891
Receive Fixed Interest Rate Swaps	Receive Fixed 0.25000%, Pay Variable 6-month Euro EURIBOR	(152,128)	7,826,944
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000%, Pay Variable 6-month Euro EURIBOR	73,542	1,185,901
Receive Fixed Interest Rate Swaps	Receive Fixed 3.74000%, Pay Variable 1-month GBP UKRPI	(687)	1,381,450
Receive Fixed Interest Rate Swaps	Receive Fixed 3.70000%, Pay Variable 1-month GBP UKRPI	(24,628)	2,624,755
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000%, Pay Variable 6-month LIBOR	2,106	5,766,285
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000%, Pay Variable 6-month Euro EURIBOR	7,827	2,964,751
Receive Fixed Interest Rate Swaps	Receive Fixed 0.35000%, Pay Variable 6-month Euro EURIBOR	45,637	4,862,192
Receive Fixed Interest Rate Swaps	Receive Fixed 6.01500%, Pay Variable 1-month MXN TIIE	(40,063)	1,705,382
Receive Fixed Interest Rate Swaps	Receive Fixed 2.77400%, Pay Variable 3-month CNY CNDR	(359)	2,166,696
Receive Fixed Interest Rate Swaps	Receive Fixed 0.51500%, Pay Variable 6-month Euro EURIBOR	-	1,185,901
Receive Fixed Interest Rate Swaps	Receive Fixed 2.75000%, Pay Variable 3-month CNY SHIBOR	(192,538)	77,072,484
Receive Fixed Interest Rate Swaps	Receive Fixed 3.08000%, Pay Variable 3-month LIBOR	543,729	1,910,000
Receive Fixed Interest Rate Swaps	Receive Fixed 7.02400%, Pay Variable 0-month Brazil BRCDI	(17,444)	3,786,482
Receive Fixed Interest Rate Swaps	Receive Fixed 7.04400%, Pay Variable 0-month Brazil BRCDI	(11,541)	3,108,901
Receive Fixed Interest Rate Swaps	Receive Fixed 7.02400%, Pay Variable 0-month Brazil BRCDI	(20,658)	4,483,992
Receive Fixed Interest Rate Swaps	Receive Fixed 7.02400%, Pay Variable 0-month Brazil BRCDI	(22,110)	4,799,267
Receive Fixed Interest Rate Swaps	Receive Fixed 7.45000%, Pay Variable 1-month MXN TIIE	498,078	13,545,617
Receive Fixed Interest Rate Swaps	Receive Fixed 7.44000%, Pay Variable 1-month MXN TIIE	509,603	14,101,605
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000%, Pay Variable 3-month LIBOR	(800,483)	70,537,818
Receive Fixed Interest Rate Swaps	Receive Fixed 1.92850%, Pay Variable 3-month LIBOR	(51)	155,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.09000%, Pay Variable 3-month LIBOR	667,786	8,100,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.80500%, Pay Variable 3-month LIBOR	4,812	875,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.25000%, Pay Variable 3-month LIBOR	(77,757)	613,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.81950%, Pay Variable 3-month LIBOR	(129,496)	2,790,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.35800%, Pay Variable 3-month LIBOR	(75,191)	4,690,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.65200%, Pay Variable 3-month LIBOR	(145,216)	4,740,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.67950%, Pay Variable 3-month LIBOR	(138,841)	4,740,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.65400%, Pay Variable 3-month LIBOR	(217,986)	4,820,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.19000%, Pay Variable 3-month LIBOR	9,156	49,691,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.68250%, Pay Variable 3-month LIBOR	(5,365)	85,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.56205%, Pay Variable 3-month FEDL	(32,886)	577,223
Receive Fixed Interest Rate Swaps	Receive Fixed 0.98536%, Pay Variable 3-month FEDL	(30,095)	217,085
Receive Fixed Interest Rate Swaps	Receive Fixed 0.90925%, Pay Variable 3-month FEDL	(12,745)	122,523
Receive Fixed Interest Rate Swaps	Receive Fixed 0.84000%, Pay Variable 3-month LIBOR	(504,622)	73,540,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.10000%, Pay Variable 3-month LIBOR	(353,598)	79,929,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.47800%, Pay Variable 3-month LIBOR	(102,907)	5,540,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.35000%, Pay Variable 12-month US CPI	(84,657)	3,190,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.87000%, Pay Variable 3-month LIBOR	18,668	875,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.90500%, Pay Variable 3-month LIBOR	13,032	437,500
Receive Fixed Interest Rate Swaps	Receive Fixed 1.51300%, Pay Variable 3-month LIBOR	1,076	280,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.63000%, Pay Variable 12-month GBP UKRPI	(174,234)	9,462,934
Receive Fixed Interest Rate Swaps	Receive Fixed 2.32500%, Pay Variable 12-month GBP UKRPI	(330,403)	12,460,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.36000%, Pay Variable 12-month US CPI	(78,359)	3,190,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.59150%, Pay Variable 3-month LIBOR	(8,761)	6,930,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.00300%, Pay Variable 3-month LIBOR	16,141	300,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.07700%, Pay Variable 3-month LIBOR	18,101	680,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.15000%, Pay Variable 3-month LIBOR	72,842	2,210,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00000%, Pay Variable 6-month Euro EURIBOR	16,206	5,858,349
Receive Fixed Interest Rate Swaps	Receive Fixed 0.82000%, Pay Variable 3-month LIBOR	(210,655)	128,660,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.90350%, Pay Variable 3-month LIBOR	17,617	590,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.35900%, Pay Variable 3-month LIBOR	(24,534)	9,110,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.52036%, Pay Variable 3-month LIBOR	29,597	5,500,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.35250%, Pay Variable 3-month LIBOR	(43,820)	20,440,000

TABLE 19 continues on the next page

TABLE 19 continuing from the previous page

Investment Type	Reference Rate	Fair Value	Notional Value
Receive Fixed Interest Rate Swaps	Receive Fixed 3.67000%, Pay Variable 12-month GBP UKRPI	(10,649)	4,703,838
Receive Fixed Interest Rate Swaps	Receive Fixed 2.54500%, Pay Variable 12-month US CPI	(33,695)	6,055,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.71500%, Pay Variable 3-month LIBOR	(208,892)	2,995,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.78430%, Pay Variable 3-month LIBOR	(3,634)	1,760,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.79635%, Pay Variable 3-month LIBOR	880	1,760,000
Subtotal - Receive Fixed Interest Rate Swaps		(2,648,138)	842,423,442
Total Interest Rate Swaps		**$ 8,867,848**	**$ 1,559,132,475**

TABLE 20

Derivative Instruments Subject to Foreign Currency Risk as of June 30, 2021

	Currency Forward Contracts				
Currency Name	Net Receivables	Net Payables	Options/Rights/ Warrants	Swaps	Total Exposure
Australian dollar	$ (18,954,168)	$ 24,422,035	$ –	$ 65,767	$ 5,533,634
Bahraini dinar	-	(16,128)	-	-	(16,128)
Brazilian real	37,245,124	(25,031,233)	-	(217,517)	11,996,374
Canadian dollar	(17,715,278)	18,748,661	1,499	(334,536)	700,346
Chilean peso	(207,516)	39,323	–	–	(168,193)
Colombian peso	(503,023)	(3,485)	–	–	(506,508)
Czech koruna	(537,041)	788,802	–	–	251,761
Danish krone	(1,415,607)	4,033,806	–	–	2,618,199
Egyptian pound	52,991	(59,932)	-	-	(6,941)
Euro	(13,783,461)	74,609,787	79,270	15,504,357	76,409,953
Hong Kong dollar	(58,067)	137,766	1,829	(257,061)	(175,533)
Hungarian forint	(899,425)	617,777	19,223	–	(262,425)
Indian rupee	(1,731,546)	328,522	–	–	(1,403,024)
Indonesian rupiah	152,830	(98,536)	-	-	54,294
Japanese yen	(12,645,857)	38,884,785	–	(127,235)	26,111,693
Kuwaiti dinar	(1,102)	-	–	-	(1,102)
Malaysian ringgit	(5,226)	66,595	–	–	61,369
Mexican peso	1,373,466	(1,502,667)	–	967,618	838,417
Moroccan dirham	(139,253)	84,789	–	–	(54,464)
New Israeli sheqel	(119,646)	134,174	–	–	14,528
New Taiwan dollar	(1,169,794)	2,318,260	–	–	1,148,466
New Zealand dollar	(11,035,282)	10,754,413	–	–	(280,869)
Norwegian krone	(13,576,844)	10,186,240	–	35,360	(3,355,244)
Norwegian krone	(4,113)	2,934,279	–	–	2,930,166
Peruvian nuevo sol	(184,646)	272,847	-	-	88,201
Philippine peso	(542,774)	106,739	–	–	(436,035)
Polish zloty	(2,066,402)	1,817,238	–	–	(249,164)
Pound sterling	(7,258,797)	18,749,815	(50,939)	(48,841)	11,391,238
Omani rial	(1)	-	–	–	(1)
Romanian ieu	(922,845)	326,152	–	–	(596,693)
Russian ruble	2,307,331	5,815	–	–	2,313,146
Saudi riyal	569	(5,246)	–	–	(4,677)
Singapore dollar	(933,455)	1,347,412	14,549	–	428,506
South African rand	(3,574,921)	2,583,883	–	–	(991,038)
South Korean won	(2,487,974)	3,305,996	-	–	818,022
Swedish krona	(7,342,467)	10,146,115	–	(800,483)	2,003,165
Swiss franc	(7,317,767)	19,343,034	–	(71,710)	11,953,557
Thailand baht	(347,011)	467,300	78,580	–	198,869
Tunisian dinar	(1)	–	17	–	16
Turkish lira	14,804	(21,219)	–	–	(6,415)
United Arab Emirates dirham	1,404	(376)	–	–	1,028
Yuan renminbi	(35,797)	273,866	–	(192,897)	45,172
Yuan renminbi - offshore	905,823	716,108	–	–	1,621,931
Total Subject to Foreign Currency Risk	**(85,462,765)**	**221,813,512**	**144,028**	**14,522,822**	**151,017,597**
U.S. dollar	–	–	934,785	31,190,289	32,125,074
Total	**$ (85,462,765)**	**$ 221,813,512**	**$ 1,078,813**	**$ 45,713,111**	**$ 183,142,671**

TABLE 21

Schedule of Changes in Capital Assets for the Fiscal Year Ended June 30, 2021

	Beginning of Year	Increases	Decreases	End of Year
Capital assets, not being depreciated or amortized:				
Land	$ 944,463	$ –	$ –	$ 944,463
Total capital assets, not being depreciated or amortized	944,463	–	–	944,463
Capital assets, being depreciated or amortized:				
Furniture and Equipment	1,333,901	23,126	(11,509)	1,345,518
Data Processing Software	40,589,573	36,988	(8,174)	40,618,387
Data Processing Hardware	2,005,974	735,175	(354,235)	2,386,914
Building and Building Improvement	8,691,997	518,406	–	9,210,403
Total capital assets being depreciated or amortized	52,621,445	1,313,695	(373,918)	53,561,222
Less accumulated depreciation or amortization for:				
Furniture and Equipment	(1,270,695)	(18,819)	–	(1,289,514)
Data Processing Software	(22,936,960)	(1,870,023)	8,175	(24,798,808)
Data Processing Hardware	(1,656,804)	(197,743)	354,235	(1,500,312)
Building and Building Improvement	(4,894,396)	(239,342)	–	(5,133,738)
Total accumulated depreciation or amortization	(30,758,856)	(2,325,927)	362,410	(32,722,373)
Total capital assets, being depreciated or amortized, net	21,862,590	(1,012,232)	(11,508)	20,838,850
Capital assets, net	**$ 22,807,053**	**$ (1,012,232)**	**$ (11,508)**	**$ 21,783,313**

Depreciation expense	**Amount**
Defined Benefit Pension Plan Depreciation	$ 2,303,695
Oregon Public Service Retirement Plan Individual Account Program Depreciation	22,232
Total depreciation expense	**$ 2,325,927**

Data processing software generated internally as part of the Oregon Retirement Information On-line Network (ORION) project is recorded at cost. The useful life is amortized using the straight-line method over 20 years. See Table 21 on page 66.

Note 6 - Reserves and Designations

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

Chapter 238 Defined Benefit Plan

Table 22 on the next page 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. Employer side accounts consist of lump sum payments deposited into the Oregon Public Employees Retirement Fund, less amounts amortized as credits to employer contributions, plus investment earnings allocated in accordance with OAR 459-007-0530. Final earnings crediting is done annually on a calendar year basis. PERS estimates that the approximate value of employer side accounts was $5,459.7 million as of June 30, 2021. Side account balances are included in the Employer Contribution Designation reserve.

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 that are 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 (a) of this subsection in each of the three immediately preceding calendar years.

E. Contingency Reserve

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

F. Employer Contingency Reserve

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

G. Unallocated Earnings Designation

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

H. OPSRP Defined Benefit Program

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

I. Employee Pension Stability Account Reserves

EPSA reserve represents the program's accumulation of redirected member IAP contributions and investment earnings less benefits and administrative expenses, amounts withdrawn by eligible members prior to retirement, amounts transferred to the Employer Contribution Designation for Tier One and Tier Two member retirements, and amounts transferred to the OPSRP defined benefit program for OPSRP member retirements.

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, 2021, the balance of this account was $752.9 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, 2021, the balance of this account was $78.4 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. Individual Account Program (IAP)

The IAP fiduciary net position balance represents member contributions and investment earnings less benefits paid and administrative expenses. As of June 30, 2021, the balance of this account was $12,791.0 million. Member contributions are described in Note 2.D.a. (Page 48) The Oregon Legislature created the IAP in 2003 to provide an individual account-based defined contribution retirement benefit for new workers hired on or after August 29, 2003, and for Tier One/Tier Two members active on and after January 1, 2004.

M. 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, 2021, the balance of this account was $2,821,8 million. The Internal Revenue Code (IRC) limits plan member contributions to an IRC 457 account to a maximum of $19,500 (calendar year 2021), with optional catch- up provisions available to members over age 50.

Enterprise Fund

N. 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, 2021, the balance of this account was $99.8 million.

Note 7 - Litigation

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

TABLE 22

Reserves and Designations	Defined Benefit Pension Plan
Chapter 238 Defined Benefit Plan and Employee Benefit Plan	
Member Reserve	$ 2,052,621,704
Employer Contribution Designation	21,370,396,415
Benefit Reserve	25,844,312,763
Tier One Rate Guarantee Reserve	448,793,002
Contingency Reserve	47,500,000
Employer Contingency Reserve	2,500,000
Unallocated Earnings Designation	25,119,119,670
OPSRP Defined Benefit Program	9,272,901,344
Employee Pension Stability Account Reserves	173,171,539
Net Position Restricted for Pension Benefits	**$ 84,331,316,437**

Note 8 - Standard Retiree Health Insurance Account

A. Basis for Estimated Liabilities

The Standard Retiree Health Insurance Account (SRHIA) establishes claim liabilities based on estimates of the ultimate costs of claims (including future claim adjustment expenses) that have been reported but not settled and of claims that have been incurred but not reported (IBNR). Table 23 below shows the changes in the aggregated estimated claims liabilities for the fiscal years ended June 30, 2021, and 2020.

The estimated claims liability was calculated by Butler Partners & Associates, PERS' health insurance consultant, at June 30, 2021, using a variety of mathematical and statistical techniques and adjusted for actual experience to produce current estimates that reflect recent settlements, claim frequency, and other economic and social factors. Adjustments to claims liabilities are charged or credited to expense in the periods in which they are made. The estimated claims liability of $830,000 is carried at its face amount, and no interest discount is assumed. The IBNR represents an estimate for claims that have been incurred prior to June 30, 2021, but have not been reported to the SRHIA.

Note 9 - Employers' Net Pension Liability

A. Actuarial Cost Method and Assumptions

The components of the net pension liability of the defined benefit pension plan are shown in Table 24 on page 71. The actuarial valuation calculations are based on the benefits provided under the terms of the plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members. The December 31, 2019, Actuarial Valuation was used to develop the GASB 67 financial reporting results for the Defined Benefit Pension Plan as of June 30, 2021, using standard roll-forward procedures. Key actuarial methods and assumptions used to measure the total pension liability are illustrated in Table 25 on page 71.

B. Discount Rate

The discount rate used to measure the total pension liability was 6.90 percent for the Defined Benefit Pension Plan, a reduction approved by the Board from 7.20 percent in the prior fiscal year. 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

TABLE 23

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

	2021	2020
Total Estimated Claims at Beginning of Fiscal Year	$ 630,000	$ 865,000
Insured Claims and Claim Adjustment Expenses		
Provision for Insured Events of Current Fiscal Year	19,407,489	11,487,321
Increase in Provision for Insured Events of Prior Years	6,535,577	6,779,488
Total Incurred Claims and Claim Adjustment Expenses	25,943,066	18,266,809
Payments		
Claims and Claim Adjustment Expenses Attributable to Insured Events of Current Fiscal Year	19,197,920	11,759,552
Claims and Claim Adjustment Expenses Attributable to Insured Events of Prior Fiscal Year	6,545,146	6,742,257
Total Payments	25,743,066	18,501,809
Total Estimated Claims at End of Fiscal Year	**$ 830,000**	**$ 630,000**

pension plan investments for the Defined Benefit Pension Plan was applied to all periods of projected benefit payments to determine the total pension liability.

C. Sensitivity Analysis

Table 26 on page 71 presents the net pension liability calculated using the discount rate of 6.90 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percent lower (5.90 percent) or 1 percent higher (7.90 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 108.

D. Long-Term Expected Rate of Return

To develop an analytical basis for the selection of the long-term expected rate of return assumption, in June 2021 the PERS Board reviewed long-term assumptions developed by both Milliman's capital market assumptions team and the Oregon Investment Council's (OIC) investment advisors. Table 31 on page 74 shows Milliman's assumptions for each of the asset classes in which the plan was invested at that time based on the OIC long-term target asset allocation. The OIC's description of each asset class was used to map the target allocation to the asset classes shown on page 74 . 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.

E. 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 value of investment assets, all others at cost) 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 when 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 an alternative evaluation of sufficiency for Oregon PERS:

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

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

Note 10 - Employers' Net OPEB (Asset)

A. Actuarial Cost Method and Assumptions

The components of the net OPEB (asset) for the OPEB plans are shown in Table 27 on page 73. 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, 2019, valuation rolled forward to June 30, 2021. Key actuarial methods and assumptions used to measure the total OPEB liability are illustrated in Table 28 on page 73

B. Discount Rate

The discount rate used to measure the total OPEB liability was 6.90 percent for the OPEB plans, a reduction approved by the Board from 7.20 percent in the prior fiscal year. The projection of cash flows used to determine the discount rate assumed that contributions from contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the OPEB plans' fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments for the OPEB plans was applied to all periods of projected benefit payments to determine the total OPEB liability.

TABLE 24

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

		2021
Total Pension Liability	$	96,297.8
Plan Fiduciary Net Position		84,331.3
Employers' Net Pension Liability	**$**	11,966.5
Plan net position as a percentage of total pension liability		87.6 %

TABLE 25

Actuarial Methods and Assumptions

	Pension
Valuation date	December 31, 2019
Measurement date	June 30, 2021
Experience Study	2018, published July 24, 2019
Actuarial assumptions:	
Actuarial cost method	Entry Age Normal
Inflation rate	2.40 percent
Long-term expected rate of return	6.90 percent
Discount rate	6.90 percent
Projected salary increases	3.40 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:*** Pub-2010 Healthy Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation. ***Active members:*** Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation. ***Disabled retirees:*** Pub-2010 Disable Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.

TABLE 26

Sensitivity of Net Pension Liability to Changes in the Discount Rate (in Millions)
As of June 30, 2021

Employers' Net Pension Liability	1% Decrease (5.90 %)	Current Discount Rate (6.90%)	1% Increase (7.90 %)
Defined Benefit Pension Plan	$ 23,499.3	$ 11,966.5	$ 2,317.7

C. Sensitivity Analysis

Table 29 on page 73 presents the net OPEB (asset) calculated using the discount rate of 6.90 percent, as well as what the net OPEB (asset) would be if it were calculated using a discount rate that is 1 percent lower (5.90 percent) or 1 percent higher (7.90 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 on page 136.

Table 30 on page 74 presents the net OPEB (asset) calculated using the current healthcare cost trend rates, as well as what the net OPEB (asset) would be if it were calculated using healthcare trend rates that are 1 percentage point lower, or 1 percentage point higher than the current rates. Healthcare trend cost rates are applicable to RHIPA only because of the variable nature of benefits.

D. Long-Term Expected Rate of Return

To develop an analytical basis for the selection of the long-term expected rate of return assumption, in June 2021 the PERS Board reviewed long-term assumptions developed by both Milliman's capital market assumptions team and the Oregon Investment Council's (OIC) investment advisors. Table 31 on page 74 shows Milliman's assumptions for each of the asset classes in which the plans were invested at that time based on the OIC long-term target asset allocation. The OIC's description of each asset class was used to map the target allocation to the asset classes shown on page 74. 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.

E. Depletion Date Projection

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

The following circumstances justify alternative evaluations of sufficiency for PERS:

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

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

Note 11—Subsequent Events

On July 15, 2021, Portland Public Schools issued pension obligation bonds resulting in a lump-sum deposit to a new side account with PERS totaling $398,665,572. On August 13, 2021, 22 school district employers issued pension obligation bonds resulting in lump-sum deposits to new side accounts with PERS totaling $654,583,738. On August 31, 2021, five community college employers issued pension obligation bonds resulting in lump-sum deposits to new side accounts totaling $212,080,721. On September 28, 2021, one school district employer issued pension obligation bonds resulting in a lump-sum deposit to a new side account totaling $73,908,669.

On July 23, 2021, the PERS Board voted to set the assumed rate of return to 6.9 percent, down from 7.2 percent. The PERS Board reviews the assumed rate in odd-numbered years as part of the board's adoption of actuarial methods and assumptions. The rate was then adopted in an administrative rule at the PERS Board's October 1, 2021, meeting. The new assumed rate will be reflected in the December 31, 2021 actuarial valuation for funding, and decreases in the assumed rate typically increase the system's unfunded actuarial liability as well as employer contribution rates. The new assumed rate was applied by the actuaries to the Net Pension Liability and Net OPEB Liability as of June 30, 2021.

TABLE 27

Net OPEB - RHIA (Asset) (in Millions) As of June 30, 2021	2021	Net OPEB - RHIPA (Asset) (in Millions) As of June 30, 2021	2021
Total OPEB - RHIA Liability	$ 409.5	Total OPEB - RHIPA Liability	$ 62.9
Plan Fiduciary Net Position	752.9	Plan Fiduciary Net Position	78.4
Employers' Net OPEB - RHIA (Asset)	**$ (343.4)**	**Employer's Net OPEB - RHIPA (Asset)**	**$ (15.5)**
Plan net position as a percentage of Total OPEB - RHIA Liability	183.9 %	Plan net position as a percentage of Total OPEB - RHIPA Liability	124.6 %

TABLE 28

Actuarial Methods and Assumptions	RHIA	RHIPA
Valuation date	December 31, 2019	December 31, 2019
Measurement date	June 30, 2021	June 30, 2021
Experience Study	2018, published July 24, 2019	2018, published July 24, 2019
Actuarial assumptions:		
Actuarial cost method	Entry Age Normal	Entry Age Normal
Inflation rate	2.40 percent	2.40 percent
Long-term expected rate of return	6.90 percent	6.90 percent
Discount rate	6.90 percent	6.90 percent
Projected salary increases	3.40 percent	3.40 percent
Retiree healthcare participation	Healthy retirees: 32% Disabled retirees: 20%	8-14 Years of Service: 10.0% 15-19 Years of Service: 15.0% 20-24 Years of Service 19.0% 25-29 Years of Service: 26.0% 30+ Years of Service: 34.0%
Healthcare cost trend rate	Not applicable	Applied at beginning of plan year, starting with 7.1% for 2019, decreasing to 4.9% for 2025, increasing to 5.0% for 2036, and decreasing to an ultimate rate of 4.0% for 2074 and beyond.
Mortality	***Healthy retirees and beneficiaries:*** Pub-2010 Healthy Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation. ***Active members:*** Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation. ***Disabled retirees:*** Pub-2010 Disabled Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.	***Healthy retirees and beneficiaries:*** Pub-2010 Healthy Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation. ***Active members:*** Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation. ***Disabled retirees:*** Pub-2010 Disabled Retiree, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.

TABLE 29

Sensitivity of Net OPEB (Asset) to Changes in the Discount Rate (in Millions)
As of June 30, 2021

Employers' Net OPEB (Asset)	1% Decrease (5.90 %)	Current Discount Rate (6.90%)	1% Increase (7.90 %)
Other Postemployment Benefit Plan - RHIA	$ (303.7)	$ (343.4)	$ (377.3)
Other Postemployment Benefit Plan - RHIPA	$ (11.6)	$ (15.5)	$ (19.2)

TABLE 30

Sensitivity of Net OPEB (Asset) to Changes in the Healthcare Cost Trend Rate (in Millions)
As of June 30, 2021

Employers' Net OPEB (Asset)	1% Decrease	Current Trend Rate	1% Increase
Other Postemployment Benefit Plan - RHIA	$ (343.4)	$ (343.4)	$ (343.4)
Other Postemployment Benefit Plan - RHIPA	(20.7)	(15.5)	(9.6)

TABLE 31

Long-Term Expected Rate of Return [1]

Asset Class	Target Allocation	Annual Arithmetic Return [2]	20-Year Annuallized Geometric Mean	Annual Standard Deviation
Global Equity	30.62 %	7.11 %	5.85 %	17.05 %
Private Equity	25.50	11.35	7.71	30.00
Core Fixed Income	23.75	2.80	2.73	3.85
Real Estate	12.25	6.29	5.66	12.00
Master Limited Partnerships	0.75	7.65	5.71	21.30
Infrastructure	1.50	7.24	6.26	15.00
Commodities	0.63	4.68	3.10	18.85
Hedge Fund of Funds - Multistrategy	1.25	5.42	5.11	8.45
Hedge Fund Equity - Hedge	0.63	5.85	5.31	11.05
Hedge Fund - Macro	5.62	5.33	5.06	7.90
US Cash	-2.50 [3]	1.77	1.76	1.20
Assumed Inflation - Mean			2.40 %	1.65 %

[1] Based on the OIC Statement of Investment Objectives and Policy Framework for the Oregon Public Employees Retirement Fund, including revisions adopted at the OIC meeting on June 2, 2021.

[2] The arithmetic mean is a component that goes into calculating the geometric mean. Expected rates of return are presented using the geometric mean, which the Board uses in setting the discount rate.

[3] Negative allocation to cash represents levered exposure from allocation to Risk Parity strategy.

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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 Fiscal Year Ended June 30,[1]
(amounts in millions)

	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability [2]								
Service Cost	$ 1,263.5	$ 1,187.2	$ 1,146.4	$ 1,108.2	$ 1,105.5	$ 1,016.8	$ 960.9	$ 1,020.3
Interest on Total Pension Liability	6,349.3	6,162.9	5,952.1	5,858.2	5,662.2	5,355.3	4,779.5	4,819.4
Effect of Plan Changes [3]	148.5	–	(50.6)	–	–	–	–	–
Changes in Benefit Terms	–	–	–	–	–	–	5,353.5	(2,423.6)
Changes in Assumptions	3,041.9	(50.5)	–	2,240.3	–	3,946.4	–	–
Differences Between Expected and Actual Experience	600.9	406.7	804.2	74.3	351.8	317.3	380.0	–
Benefit Payments, including refunds of contributions	(5,249.0)	(5,064.8)	(4,827.0)	(4,656.6)	(4,362.2)	(4,206.5)	(3,943.6)	(3,863.4)
Net Change in Total Pension Liability	6,155.1	2,641.5	3,025.1	4,624.4	2,757.3	6,429.3	7,530.3	(447.3)
Total Pension Liability - Beginning	90,142.7	87,501.2	84,476.1	79,851.7	77,094.4	70,665.1	63,134.8	63,582.1
Total Pension Liability - Ending	$ 96,297.8	$ 90,142.7	$ 87,501.2	$ 84,476.1	$ 79,851.7	$ 77,094.4	$ 70,665.1	$ 63,134.8
Plan Fiduciary Net Position								
Employer Contributions	$ 2,161.5	$ 2,299.0	$ 1,720.2	$ 1,390.1	$ 1,022.2	$ 977.3	$ 1,123.3	$ 915.2
Member Contributions	160.3	10.2	11.4	12.6	13.1	14.2	13.8	15.3
Net Investment and Other Income	18,998.4	923.3	4,010.0	6,247.5	7,660.0	413.9	2,364.5	9,886.6
Benefit Payments	(5,237.2)	(5,064.8)	(4,815.1)	(4,642.7)	(4,346.2)	(4,193.3)	(3,927.2)	(3,837.8)
Refunds of Contributions	(11.9)	–	(11.9)	(13.9)	(16.0)	(13.1)	(16.5)	(25.6)
Administrative Expense	(59.1)	(52.1)	(38.4)	(37.8)	(43.5)	(40.5)	(35.7)	(31.2)
Net Change in Plan Fiduciary Net Position	16,012.0	(1,884.4)	876.2	2,955.8	4,289.6	(2,841.5)	(477.8)	6,922.5
Plan Fiduciary Net Position - Beginning	68,319.3	70,203.7	69,327.5	66,371.7	62,082.1	64,923.6	65,401.4	58,478.9
Plan Fiduciary Net Position - Ending	$ 84,331.3	$ 68,319.3	$ 70,203.7	$ 69,327.5	$ 66,371.7	$ 62,082.1	$ 64,923.6	$ 65,401.4
Net Pension Liability/(Asset)	$ 11,966.5	$ 21,823.4	$ 17,297.5	$ 15,148.6	$ 13,480.0	$ 15,012.3	$ 5,741.5	$ (2,266.6)
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	87.6 %	75.8 %	80.2 %	82.1 %	83.1 %	80.5 %	91.9 %	103.6 %
Covered Payroll	$ 12,235.5	$ 11,574.8	$ 10,716.7	$ 10,044.0	$ 10,037.5	$ 9,428.4	$ 9,000.2	$ 8,701.7
Net Pension Liability/(Asset) as a Percentage of Covered Payroll	97.8 %	188.5 %	161.4 %	150.8 %	134.3 %	159.2 %	63.8 %	(26.0) %

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

[2] See Table 25 for Actuarial Methods and Assumptions

[3] Senate Bill 1049, signed into law in June 2019, introduced a limit on the amount of annual salary included for the calculation of benefits. Beginning in 2020, annual salary in excess of $195,000 (as indexed in future years) will be excluded when determining member benefits. As a result, future benefits for certain active members are now projected to be lower than prior to the legislation. Senate Bill 111, enacted in June 2021, provides an increased pre-retirement death benefit for members who die on or after their early retirement age.

Changes in Benefit Terms and Assumptions:

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

Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2016 total pension liability and June 30, 2018 total pension liability. For June 30, 2016, the changes included the lowering of the long-term expected rate of return to 7.50 percent and lowering of the assumed inflation to 2.50 percent. For June 30, 2018, the long-term expected rate of return was lowered to 7.20 percent. For June 30, 2021, the long-term expected rate of return was lowered to 6.90 percent, and the inflation rate was lowered from 2.5 to 2.4 percent. In addition, the healthy mortality assumption was changed to reflect an updated mortality improvement scale for all groups, and assumptions were updated for merit increases, unused sick leave, and vacation pay were updated.

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

	2021	2020	2019	2018	2017	2016	2015	2014
Annual Money-Weighted Rate of Return Net of Investment Expense	26.2%	0.5%	6.4%	9.7%	11.8%	1.6%	3.7%	17.2%

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

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

	2021	2020	2019	2018	2017
Actuarially determined contributions	$ 2,058,483	$ 1,981,943	$ 1,410,966	$ 1,318,672	$ 960,254
Contributions in relation to the actuarially determined contributions[2]	2,058,483	1,981,943	1,410,966	1,318,672	960,254
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 12,235,510	$ 11,574,796	$ 10,716,707	$ 10,044,005	$ 10,037,542
Contributions as a percentage of covered payroll	16.82%	17.12%	13.17%	13.13%	9.57%

Notes:

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

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

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

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	December 31, 2017	December 31, 2015	December 31, 2013
Effective:	July 2019 - June 2021	July 2017 - June 2019	July 2015 - June 2017
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll	Level percentage of payroll	Level percentage of
Asset valuation method:	Fair value	Fair value	Fair value
Remaining amortization periods:	20 years	20 years	20 years
Actuarial assumptions:			
Inflation rate	2.50 percent	2.50 percent	2.75 percent
Projected salary increases	3.50 percent	3.50 percent	3.75 percent
Investment rate of return	7.20 percent	7.50 percent	7.75 percent

2016	2015	2014	2013	2012
$ 941,321	$ 909,912	$ 866,635	$ 781,015	$ 774,461
941,321	909,912	866,635	781,015	774,461
$ –	$ –	$ –	$ –	$ –
$ 9,428,447	$ 9,000,246	$ 8,701,657	$ 8,280,731	$ 8,650,799
9.98%	10.11%	9.96%	9.43%	8.95%

December 31, 2011	December 31, 2009	December 31, 2007
July 2013 - June 2015	July 2011 - June 2013	July 2009 - June 2011
Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll	Level percentage of payroll	Level percentage of payroll
Fair value	Fair value	Fair value
N/A	N/A	20 years
2.75 percent	2.75 percent	2.75 percent
3.75 percent	3.75 percent	3.75 percent
8.00 percent	8.00 percent	8.00 percent

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

	2021	2020	2019	2018	2017
Total OPEB Liability [2]					
Service Cost	$ 2.0	$ 2.3	$ 2.5	$ 3.1	$ 3.4
Interest on Total OPEB Liability	28.3	30.3	32.4	34.2	33.8
Changes in Benefit Terms	–	–	–	–	–
Changes in Assumptions	10.7	(16.5)	–	(0.5)	–
Differences Between Expected and Actual Experience	(7.1)	(13.0)	(32.3)	(9.1)	–
Benefit Payments	(31.3)	(31.8)	(32.2)	(32.5)	(31.2)
Net Change in Total OPEB Liability	2.6	(28.7)	(29.6)	(4.8)	6.0
Total OPEB Liability - Beginning	406.9	435.6	465.2	470.0	464.0
Total OPEB Liability - Ending	$ 409.5	$ 406.9	$ 435.6	$ 465.2	$ 470.0
Plan Fiduciary Net Position					
Employer Contributions	$ 3.0	$ 6.3	$ 49.6	$ 48.0	$ 49.8
Net Investment and Other Income	171.8	8.6	36.0	50.9	57.6
Benefit Payments	(31.3)	(31.8)	(32.2)	(32.6)	(31.2)
Administrative Expense	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)
Net Change in Plan Fiduciary Net Position	142.2	(18.2)	52.1	65.0	74.9
Plan Fiduciary Net Position - Beginning	610.7	628.9	576.8	511.8	436.9
Plan Fiduciary Net Position - Ending	$ 752.9	$ 610.7	$ 628.9	$ 576.8	$ 511.8
Net OPEB (Asset)	$ (343.4)	$ (203.8)	$ (193.3)	$ (111.6)	$ (41.8)
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	183.9	150.1	144.4 %	124.0 %	108.9 %
Covered Payroll	$ 3,929.8	$ 3,955.6	$ 4,023.3	$ 4,303.2	$ 4,570.1
Net OPEB (Asset) as a Percentage of Covered Payroll	(8.74) %	(5.15) %	(4.80) %	(2.59) %	(0.91) %

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

Changes in Benefit Terms and Assumptions:
Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2021 total OPEB liability. The changes include the lowering of the long-term expected rate of return from 7.20 to 6.90 percent and the inflation rate from 2.5 to 2.4 percent. In addition, the healthy healthcare participation and healthy mortality assumptions were changed to reflect an updated trends and mortality improvement scale for all groups.

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

	2021	2020	2019	2018	2017
Annual Money-Weighted Rate of Return Net of Investment Expense	26.3%	0.6%	6.7%	9.7%	12.5%

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

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

	2021	2020	2019	2018	2017
Total OPEB Liability [2]					
Service Cost	$ 1.3	$ 1.4	$ 1.5	$ 1.5	$ 1.5
Interest on Total OPEB Liability	4.5	5.1	5.0	5.2	5.0
Changes in Benefit Terms	–	–	–	–	–
Changes in Assumptions	1.1	(7.9)	–	0.4	–
Differences Between Expected and Actual Experience	(4.6)	(2.2)	(0.3)	(3.0)	–
Benefit Payments	(3.7)	(4.1)	(4.5)	(4.7)	(4.3)
Net Change in Total OPEB Liability	(1.4)	(7.7)	1.7	(0.6)	2.2
Total OPEB Liability - Beginning	64.3	72.0	70.3	70.9	68.7
Total OPEB Liability - Ending	$ 62.9	$ 64.3	$ 72.0	$ 70.3	$ 70.9
Plan Fiduciary Net Position					
Employer Contributions	$ 11.8	$ 11.2	$ 14.0	$ 13.3	$ 11.9
Net Investment and Other Income	16.3	0.8	2.5	2.4	2.0
Benefit Payments	(3.7)	(4.1)	(4.5)	(4.7)	(4.3)
Administrative Expense	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
Net Change in Plan Fiduciary Net Position	24.1	7.6	11.7	10.7	9.3
Plan Fiduciary Net Position - Beginning	54.3	46.7	35.0	24.3	15.0
Plan Fiduciary Net Position - Ending	$ 78.4	$ 54.3	$ 46.7	$ 35.0	$ 24.3
Net OPEB Liability/(Asset)	$ (15.5)	$ 10.0	$ 25.3	$ 35.3	$ 46.6
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	124.6	84.5 %	64.9 %	49.8 %	34.3 %
Covered Payroll	$ 1,159.0	$ 1,166.4	$ 1,120.5	$ 1,165.3	$ 1,327.1
Net OPEB (Asset)/Liability as a Percentage of Covered Payroll	(1.34) %	0.86 %	2.26 %	3.03 %	3.51 %

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

Changes in Benefit Terms and Assumptions:
Assumptions: The PERS Board adopted assumption changes that were used to measure the June 30, 2021 total OPEB liability. The changes include the lowering of the long-term expected rate of return from 7.20 to 6.90 percent and the inflation rate from 2.5 to 2.4 percent. In addition, the healthy healthcare participation and cost trend rates, and healthy mortality assumptions were changed to reflect an updated trends and mortality improvement scale for all groups.

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

	2021	2020	2019	2018	2017
Annual Money-Weighted Rate of Return Net of Investment Expense	26.6%	1.0%	7.6%	10.2%	14.3%

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

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

	2021	2020	2019	2018	2017
Actuarially determined contributions[1]	$ 2,963	$ 6,360	$ 49,615	$ 47,998	$ 49,786
Contributions in relation to the actuarially determined contributions	2,963	6,360	49,615	47,998	49,786
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 12,235,510	$ 11,574,796	$ 10,716,707	$ 10,044,005	$ 10,037,542
Contributions as a percentage of covered payroll	0.02%	0.05%	0.46%	0.48%	0.50%

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

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	**December 31, 2017**	**December 31, 2015**	**December 31, 2013**
Effective:	July 2019 - June 2021	July 2017 - June 2019	July 2015 - June 2017
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
Amortization Period:	10 years	10 years	10 years
Asset valuation method:	Market value	Market value	Market value
Remaining amortization periods:	10 years	20 years	20 years
Actuarial assumptions:			
Inflation rate	2.50 percent	2.50 percent	2.75 percent
Healthcare cost trend rates	None. Statute stipulates $60 monthly payment for healthcare insurance.	None. Statute stipulates $60 monthly payment for healthcare insurance.	None. Statute stipulates $60 monthly payment for healthcare insurance.
Projected salary increases	3.50 percent	3.50 percent	3.75 percent
Investment rate of return	7.20 percent	7.50 percent	7.75 percent

2016	2015	2014	2013	2012
$ 44,588	$ 53,648	$ 48,253	$ 47,294	$ 46,465
44,588	53,648	48,253	47,294	46,465
$ –	$ –	$ –	$ –	$ –
$ 9,428,447	$ 9,000,246	$ 8,686,772	$ 8,686,771	$ 8,650,799
0.47%	0.60%	0.56%	0.54%	0.54%

December 31, 2011	December 31, 2009	December 31, 2007
July 2013 - June 2015	July 2011 - June 2013	July 2009 - June 2011
Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
10 years	10 years	N/A
Market value	Market value	Market value
N/A	N/A	20 years
2.75 percent	2.75 percent	2.75 percent
None. Statute stipulates $60 monthly payment for healthcare insurance.	None. Statute stipulates $60 monthly payment for healthcare	None. Statute stipulates $60 monthly payment for
3.75 percent	3.75 percent	3.75 percent
8.00 percent	8.00 percent	8.00 percent

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

	2021	2020	2019	2018	2017
Actuarially determined contributions[1]	$ 11,724	$ 11,242	$ 14,009	$ 13,290	$ 11,864
Contributions in relation to the actuarially determined contributions	11,724	11,242	14,009	13,290	11,864
Contribution deficiency (excess)	$ –	$ –	$ –	$ –	$ –
Covered payroll	$ 3,794,773	$ 3,555,791	$ 3,118,065	$ 2,952,776	$ 3,024,383
Contributions as a percentage of covered payroll	0.31%	0.32%	0.45%	0.45%	0.39%

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

Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions

Actuarial Valuation:	December 31, 2017	December 31, 2015	December 31, 2013
Effective:	July 2019 - June 2021	July 2017 - June 2019	July 2015 - June 2017
Actuarial cost method:	Entry Age Normal	Entry Age Normal	Entry Age Normal
Amortization method:	Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
Amortization Period:	10 years	10 years	10 years
Asset valuation method:	Market value	Market value	Market value
Remaining amortization periods:	10 years	20 years	20 years
Actuarial assumptions:			
Inflation rate	2.50 percent	2.50 percent	2.75 percent
Healthcare cost trend rates	Graded from 6.5 percent in 2018 to 4.2 percent in 2093.	Graded from 6.3 percent in 2016 to 4.4 percent in 2094.	Graded from 6.1 percent in 2014 to 4.7 percent in
Projected salary increases	3.50 percent	3.50 percent	3.75 percent
Investment rate of return	7.20 percent	7.50 percent	7.75 percent

2016	2015	2014	2013	2012
$ 10,967	$ 6,887	$ 6,150	$ 3,444	$ 3,378
10,967	6,887	6,150	3,444	3,378
$ –	$ –	$ –	$ –	$ –
$ 2,850,753	$ 2,737,792	$ 2,566,555	$ 2,422,404	$ 2,563,850
0.38%	0.25%	0.24%	0.14%	0.13%

December 31, 2011	December 31, 2009	December 31, 2007
July 2013 - June 2015	July 2011 - June 2013	July 2009 - June 2011
Projected Unit Credit	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
10 years	10 years	N/A
Market value	Market value	Market value
N/A	N/A	20 years
2.75 percent	2.75 percent	2.75 percent
Graded from 6.9 percent in 2012 to 4.5 percent in	Graded from 7.0 percent in 2010 to 4.5 percent in	Graded from 8.0 percent in 2008 to 5.0
3.75 percent	3.75 percent	3.75 percent
8.00 percent	8.00 percent	8.00 percent

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

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1. Net earned required contribution and investment revenues	$ 188.99	$ 195.59	$ 198.85	$ 226.61	$ 197.92	$ 157.55	$ 176.38	$ 111.68	$ 32.49	$ 31.27
2. Unallocated expenses	22.15	25.00	29.00	32.09	26.30	16.55	16.11	11.36	4.98	4.43
3. Estimated incurred claims and expense, end of policy year	150.62	172.89	175.41	212.21	179.01	133.10	142.94	83.24	18.27	25.94
4. Paid (cumulative) as of:										
End of policy year	160.15	172.76	175.01	211.90	184.61	133.60	142.44	91.57	18.50	25.74
One year later	171.80	185.22	192.78	226.61	200.50	151.25	149.18	98.32	25.05	
Two years later	171.68	185.21	192.81	226.61	200.50	151.78	156.07	98.31		
Three years later	171.66	185.20	192.81	226.61	200.49	151.75	156.05			
Four years later	171.66	185.20	192.81	226.60	200.48	151.75				
Five years later	171.66	185.20	192.81	226.60	200.48					
Six years later	171.66	185.20	192.81	226.60						
Seven years later	171.66	185.20	192.81							
Eight years later	171.66	185.20								
Nine years later	171.66									
5. Reestimated incurred claims and expense:										
End of policy year	150.62	172.89	175.41	212.21	179.01	133.10	142.94	83.24	18.27	25.94
One year later	162.27	185.35	193.18	226.92	194.90	151.25	149.68	89.98	24.81	
Two years later	162.20	185.34	193.21	226.92	194.91	151.28	156.57	89.97		
Three years later	162.17	185.33	193.21	226.91	194.90	151.25	156.55			
Four years later	162.17	185.33	193.22	226.91	194.88	151.25				
Five years later	162.17	185.33	193.21	226.90	194.88					
Six years later	162.17	185.33	193.21	226.90						
Seven years later	162.17	185.33	193.21							
Eight years later	162.17	185.33								
Nine years later	162.17									
6. Increase in estimated incurred claims and expense from end of policy year:	11.58	12.46	17.77	14.71	15.89	18.15	13.59	6.74	6.55	

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75 years of serving
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Other Supplementary Information
Schedule of Plan Net Position
Defined Benefit Pension Plan
As of June 30, 2021

	Regular Account	Employee Pension Stability Account PERS 238/Regular (Tier 1/Tier 2)	Oregon Public Service Retirement Plan Pension Program
Assets:			
Cash and Cash Equivalents	$ 2,788,674,403	$ 4,390,372	$ 426,353,943
Receivables:			
Employer	19,353,805	–	14,634,818
Interest and Dividends	104,484,901	124,568	12,873,336
Investment Sales and Other Receivables	791,643,272	919,502	95,396,925
Transitional Liability	358,150,836	–	–
Total Receivables	1,273,632,814	1,044,070	122,905,079
Interaccount Receivables and Payables	9,432,450	–	(6,832,835)
Due from Other Funds	(11,207,663)	15,015,967	–
Investments:			
Debt Securities	11,781,881,555	14,046,464	1,451,617,593
Public Equity	22,648,644,015	27,001,915	2,790,485,539
Real Estate	8,028,379,704	9,571,506	989,157,561
Private Equity	20,345,711,767	24,256,338	2,506,746,736
Alternatives Portfolio	7,630,305,813	9,096,918	940,111,824
Opportunity Portfolio	1,681,375,871	2,004,551	207,158,321
Total Investments	72,116,298,725	85,977,692	8,885,277,574
Securities Lending Collateral	505,270,911	602,710	62,281,314
Prepaid Expenses	9,270,832	7,775	803,549
Capital Assets at Cost, Net	20,166,414	–	1,439,040
Total Assets	**76,711,538,886**	**107,038,586**	**9,492,227,664**
Liabilities:			
Investment Purchases and Accrued Expenses	1,727,805,081	1,501,703	155,789,121
Deposits and Other Liabilities	37,780,356	–	1,241,613
Due Other Funds	68,836	–	9,295
Securities Lending Collateral Due Borrowers	505,311,290	602,758	62,286,289
Total Liabilities	**2,270,965,563**	**2,104,461**	**219,326,318**
Net Position Restricted for Pension Benefits	**$ 74,440,573,323**	**$ 104,934,125**	**$ 9,272,901,346**

Employee Pension Stability Account OPSRP Program	Variable Account	Total
$ 2,914,993	$ 6,643,339	$ 3,228,977,050
–	–	33,988,623
80,508	–	117,563,313
594,277	–	888,553,976
–	–	358,150,836
674,785	–	1,398,256,748
	(2,599,615)	–
10,045,589	–	13,853,893
9,078,266	–	13,256,623,878
17,451,408	443,336,845	25,926,919,722
6,186,089	–	9,033,294,860
15,676,935	–	22,892,391,776
5,879,362	–	8,585,393,917
1,295,547	–	1,891,834,290
55,567,607	443,336,845	81,586,458,443
389,547	2,556	568,547,038
5,025	–	10,087,181
–	–	21,605,454
69,597,546	**447,383,125**	**86,827,785,807**
970,554	2,708,771	1,888,775,230
–	1,569	39,023,538
–	–	78,131
389,578	2,556	568,592,471
1,360,132	**2,712,896**	**2,496,469,370**
$ **68,237,414**	$ **444,670,229**	$ **84,331,316,437**

Other Supplementary Information
Schedule of Changes in Plan Net Position
Defined Benefit Pension Plan
For the Fiscal Year Ended June 30, 2021

	Regular Account	Employee Pension Stability Account PERS 238/Regular (Tier 1/Tier 2)	Oregon Public Service Retirement Plan Pension Program
Additions:			
Contributions:			
Employer	$ 1,245,025,545	$ –	$ 916,425,382
Plan Member	9,703,998	91,107,755	–
Total Contributions	1,254,729,543	91,107,755	916,425,382
Investment Income:			
Net Appreciation in Fair Value of Investments	16,325,150,158	13,287,304	1,836,944,886
Interest, Dividends and Other Investment Income	1,414,292,572	1,235,796	129,228,280
Total Investment Income	17,739,442,730	14,523,100	1,966,173,166
Less Investment Expense	(801,117,216)	(698,245)	(78,474,216)
Net Investment Income	16,938,325,514	13,824,855	1,887,698,950
Securities Lending Income:			
Securities Lending Income	5,682,034	2,450	646,490
Less Securities Lending Expense	(1,462,333)	(695)	(167,638)
Net Securities Lending Income	4,219,701	1,755	478,852
Other Income	–	–	8,938
Total Additions	18,197,274,758	104,934,365	2,804,612,122
Deductions			
Benefits	5,139,442,862	–	59,868,944
Death Benefits	4,922,561	–	–
Refunds of Contributions	11,855,341	–	–
Administrative Expense	48,685,249	240	8,726,971
Interaccount Transfers	(47,312,063)	–	–
Total Deductions	5,157,593,950	240	68,595,915
Net Increase	13,039,680,808	104,934,125	2,736,016,207
Net Position Restricted for Pension Benefits			
Beginning of Year	61,400,892,515	–	6,536,885,139
End of Year	$ 74,440,573,323	$ 104,934,125	$ 9,272,901,346

Employee Pension Stability Account OPSRP Program	Variable Account	Total
$ –	$ –	$ 2,161,450,927
59,320,091	177,503	160,309,347
59,320,091	177,503	2,321,760,274
8,591,518	145,244,867	18,329,218,733
756,628	45,697	1,545,558,973
9,348,146	145,290,564	19,874,777,706
(431,715)	(351,062)	(881,072,454)
8,916,431	144,939,502	18,993,705,252
1,580	3	6,332,557
(448)	(3)	(1,631,117)
1,132	–	4,701,440
–	–	8,938
68,237,654	145,117,005	21,320,175,904
–	32,903,228	5,232,215,034
–	–	4,922,561
–	79,124	11,934,465
240	1,671,700	59,084,400
–	47,312,063	-
240	81,966,115	5,308,156,460
68,237,414	63,150,890	16,012,019,444
–	381,519,339	68,319,296,993
$ 68,237,414	$ 444,670,229	$ 84,331,316,437

Other Supplementary Information
Schedule of Administrative Expenses - All Funds
For the Fiscal Year Ended June 30, 2021

Personal Services:		
Staff Salaries	$	27,959,130
Social Security		5,928,268
Retirement		2,125,028
Unemployment Compensation		12,378
Workers' Compensation		7,711
Insurance		6,756,790
Assessments		179,786
Total Personal Services		42,969,091
Professional Services:		
Actuarial		952,268
Data Processing		14,122
Audit		440,862
Legal Counsel		407,919
Medical Consultants		157,032
Training and Recruitment		191,552
Contract Services		14,993,540
Healthcare Fees		4,856,014
Total Professional Services		22,013,308
Communications:		
Printing		255,375
Telephone		231,457
Postage		577,975
Travel		33,346
Total Communication		1,098,153
Rentals:		
Office Space		775,275
Equipment		(1,281)
Total Rentals		773,994
Miscellaneous:		
Central Government Charges		7,572,293
Supplies		1,494,117
Maintenance		1,129,044
Non-Capitalized Equipment		966,807
Depreciation		2,325,927
Other		1,360
Total Miscellaneous		13,489,548
Total Administrative Expenses:	**$**	**80,344,094**

Other Supplementary Information
Schedule of Payments to Consultants and Contractors
For the Fiscal Year Ended June 30, 2021

Individual or Firm	Fees Paid	Nature of Service
Milliman Inc	$ 952,268	Actuarial
Macias Gini & O'Connell LLP	440,862	Audit
Oregon Audits Division	12,133	Audit
CEM Benchmarking	100,000	Benchmarking
Deloitte Consulting LLP	3,766,000	Consulting
ADT Commercial	1,983	Contractual
Ampersand Content LLC	19,500	Contractual
Pinnacle Architecture	256,412	Contractual
Pioneer Waterproofing	569,858	Contractual
Sazan Group Inc	360,062	Contractual
Shi International	9,688	Contractual
Suddath Relocation Systems	4,961	Contractual
Department of Administrative Servies	99,888	Contractual
Butler Partners & Associates LLC	314,064	Health Insurance
BenefitHelp Solutions	6,604,316	Health Insurance
Voya	4,068,338	IAP Administration
Ice Miller LLP	10,237	Legal
Oregon Department of Justice	236,431	Legal
Jill Goldsmith Atty At Law	4,715	Legal
Frederick William Miller MD	88,900	Medical
Docusign	15,625	Technology
Gartner Group Inc	1,147,000	Technology
Lancesoft	19,340,827	Technology
LexisNexis Risk Data Management Inc	14,159	Technology
Harris Worksystems	150	Technology
Proposal Technologies Network	26,650	Technology
Oregon Department of Human Services	48,637	Vital Records
	$ 38,513,662	

Other Supplementary Information
Summary of Investment Fees, Commissions, and Expenses
For the Fiscal Year Ended June 30, 2021

	2021
Debt Securities Managers	
Alliance Bernstein L.P.	$ 1,606,289
Ashmore Investment Management Corporation	101,225
BlackRock Financial Management	1,747,148
KKR Financial Credit Portfolio	3,615,371
Morgan Stanley	87,788
Oak Hill Advisors	7,470,013
PGIM Fixed Income	93,490
PIMCO Investments LLC	326,683
Wellington Management Company, LLP	1,143,264
Western Asset Management Company	1,366,373
Domestic Equity Fund Managers	
Aronson, Johnson, & Ortiz, LP	697,229
AQR Capital Management, LLC	943,219
Boston Company/Mellon	1,780,009
Callan US Microcap Value	1,216,296
Dimensional Fund Advisors	3,333,949
Eudaimonia Asset Management	1,280,540
International Equity Fund Managers	
Acadian Asset Management, Inc.	4,121,433
Adrian Lee & Partners	1,300,000
AHL Partners LLP	3,411,662
Alliance Bernstein International	1,700,296
AQR Capital Management	3,592,959
Arrowstreet Capital, LP	12,984,203
Aspect Capital Limited	1,500,000
Brandes Investment Partners LLC	1,957,227
Bridgewater Associates, LP	1,910,827
Dimensional Fund Advisors	3,680,172
EAM Investors, LLC	803,634
Genesis Asset Managers, LLP	2,406,048
Harris Associates LP	1,962,673
Lazard Asset Management	4,650,478
Los Angeles Capital Management	2,658,975
Pangora Asset Management	2,141,692
PE Global LLC	1,348,141
Walter Scott Management	2,478,595
Westwood Global Investments	1,357,377
William Blair & Company, LLC	2,714,833
Real Estate Portfolio Managers	
ABKB / Lasalle Advisors-Intl	914,083
Aetos Capital Asia III	47,336
Aetos Capital Asia TE II	33,051
AG Asia Realty Fund II, LP	1,980
ASB Allegiance RE	1,395,398
Ascentris - OR Partners LLC	3,655,750
Ascentris Core	1,138,837
Beacon Capital Strategic Partners VI, LP	14,226
Blackstone Real Estate Partners IX, LP	3,750,000
Blackstone Real Estate Partners VII, LP	499,585
Brazil Real Estate Opportunities II	733,977
Cameron Village	534,450
Clarion	657,093
Clarion (Non Mandate)	796,380
Clarion Columbia Office Property	4,944,005
Columbia Woodbourne Holdings, LLC	475,981
DivcoWest Fund IV REIT, LP	121,288
DivcoWest Fund V	1,839,570
DivcoWest Fund VI	1,630,020
DW-Columbia Perfco	1,552,320
Harrison Street Core Property Fund Co-Investment	183,385
Harrison Street Core Property Fund, LP	1,526,727
Harrison Street Real Estate Partners V-A	847,844
Harrison Street REP V Co-Investment	219,740
Harrison Street REP VIII	937,500

	2021
Real Estate Portfolio Managers (continued)	
Heitman America Real Estate Trust, LP	$ 1,157,527
Heritage Fields Capital	371,371
IL & FS India Realty Fund	207,236
IL & FS India Realty Fund II	178,981
JPMCB Strategic Property Fund	1,695,651
Landmark Real Estate Partners VII, LP	323,955
LBA Core Industrial	745,141
Lincoln CIP Industrial Core	4,340,045
Lincoln (Non Mandate)	535,804
Lion Mexico Fund	205,112
Lionstone One Value Add	3,345,883
Lone Star Fund IX	327,459
Lone Star Fund VIII	204,967
Lone Star Real Estate Fund II	1,098
Lone Star Real Estate Fund III	3,214
Lone Star Real Estate Fund IV	246,128
Lone Star Real Estate Fund V	192,908
LORE One, L.P. (Core)	5,233,182
Madison Realty Capital Debt Fund III, LP	1,337,098
Morgan Stanley Prime Property Fund	2,243,463
Nuveen U.S. Cities Multifamily Fund	154,349
Oak Street Real Estate Capital Fund V	376,948
Och Ziff RE III (Sculptor 3)	383,718
Oregon Abacus Multifamily Associates LP	656,674
Prologis Targeted Europe Logistics Fund	2,209,919
Prologis Targeted US Logistic Fund	2,587,354
Regency Core	1,118,240
Regency II	1,303,920
Rockpoint Finance Fund I, LP	7,161
Rockpoint Growth and Income Fund I, LP	826,069
Rockpoint Real Estate Fund II, LP	21,801
Rockpoint Real Estate Fund III	168,443
Rockpoint Real Estate Fund IV	244,212
RREEF America REIT II	966,338
Sculptor RE IV	1,310,692
Starwood Cap Hospitality Fd II Global LP	411,091
Vornado Capital Partners LP	309,020
Waterton Fund IX PT Chicago, LLC	582,000
Waterton Residential Property Venture XII	932,122
Waterton Residential Property XI	178,616
Windsor Columbia Realty Fund	8,228,695
Private Equity Portfolio Managers	
A&M Capital Partners	451,800
A&M Capital Partners Europe	2,274,885
A&M Capital Partners II	3,000,000
ACON Equity Partners IV	1,701,412
Advent Global Technology	750,000
Advent International Global Private Equity IX	1,500,000
Advent International Global Private Equity VI A	151,322
Advent International Global Private Equity VII C	335,888
Advent Latin American Private Equity VI	1,046,306
Advent Latin American Private Equity VII	1,728,261
APAX IX	2,644,141
APAX VIII	866,003
Apollo Investment Fund IX	6,240,000
Apollo Investment Fund VII	124,702
Apollo Investment Fund VIII	1,615,069
Aquiline Financial Services Fund III	1,105,578
BDCM Opportunity Fund IV	1,187,567
Black Diamond Opportunity III	617,359
Blackstone Capital Partners VI	607,933
Blackstone Capital Partners VII	3,982,255
Blackstone Capital Partners VIII	4,739,583
Blackstone Energy Partners II	1,598,391

Other Supplementary Information
Summary of Investment Fees, Commissions, and Expenses
For the Fiscal Year Ended June 30, 2021

Private Equity Portfolio Managers (continued)	2021
Bridgepoint Europe VI	$ 3,786,252
Bridgepoint Europe VI (Sidecar)	73,106
Capital International Private Equity Fund VI	411,666
CDH Fund V	1,270,562
Centerbridge Capital Partners III	1,566,981
Centerbridge Special Credit Partners III	1,406,414
Cinven VI Fund	1,495,998
Cinven VII Fund	3,145,520
Clearlake Capital Partners VI	3,274,048
Clearvue Partners III	2,400,000
Coller International Partners VI	738,346
CVC Capital Partners Asia V	2,250,000
CVC Capital Partners VI	1,343,597
CVC Capital Partners VII	3,786,253
CVC Capital Partners VIII	480,138
EnCap Energy Capital Fund X	892,509
EnCap Energy Capital Fund XI	3,750,000
Endeavour Capital Fund VII	1,702,443
Essex Woodlands Health VIII	7,799,626
Fifth Cinven Fund	392,689
Fisher Lynch Capital Fund II	427,190
Francisco Partners V	1,690,804
Francisco Partners VI	1,691,576
General Atlantic Partners	9,500,391
Genstar Capital Partners IX	2,727,443
Genstar Capital Partners VIII	2,017,899
GGV Capital Select	251,316
GGV Capital V	710,196
GGV Capital VI	674,644
GGV Capital VII	1,229,207
GGV Capital VIII	450,000
GGV Discovery I	76,516
GGV Discovery II	388,286
GGV Discovery III	187,500
GI Partners Fund IV	1,375,380
GI Partners Fund V	3,599,452
Granite Ventures II	92,698
Green Equity Investors VI	790,698
Green Equity Investors VII	2,834,024
GSO Capital Opportunities Fund II	139,201
GTCR Fund XII	1,646,243
Hamilton Lane International SMID Fund	879,875
Hellman & Friedman Capital Partners IX	4,200,000
Hellman & Friedman Capital Partners VIII	654,840
Hellman & Friedman Capital Partners X	836,538
KKR Asian Fund	1,369
KKR Asian Fund II	706,150
KKR Asian Fund III	2,420,809
KKR European Fund III	50,920
KKR North America XI Fund	874,447
KKR North America XII Fund	5,260,852
KPS Special Situations Fund V	592,731
KSL Capital Credit Opportunities Fund	317,181
KSL Capital Partners Fund III	325,013
KSL Capital Partners Fund IV	1,426,326
KSL Capital Partners Fund V	3,500,000
Lion Capital Fund II	34,956
Lion Capital Fund III	(7,902)
Littlejohn Fund IV	40,964
Luminate Capital Partners III	1,491,667
Mayfield Select	59,761
Mayfield XIV	602,670
Mayfield XV	677,490
Mayfield XVI	137,968

Private Equity Portfolio Managers (continued)	2021
MBK Partners Fund IV	$ 1,443,952
MHR Institutional Partners IV	2,580,472
Nordic Capital Fund VIII	755,576
North Haven Private Equity Asia IV	1,106,827
Northwest Emerging Ventures	25,000
Northwest Emerging Ventures II	105,000
Northwest Emerging Ventures III	125,000
Novalpina Capital Fund I	814,737
Oak Investments Partners XIII	(4,265)
Oaktree European Principal Fund III (US)	677,143
Oaktree Opportunities Fund IX	818,218
Oaktree Opportunities Fund VIII	10,227
Oaktree Opportunities Fund VIIIb	304,827
Oaktree Opportunities Fund X	664,000
Oaktree Opportunities Fund Xb	1,600,000
Odyssey Investment Partners Fund VI	3,000,000
OrbiMed Private Investments V	218,912
OrbiMed Private Investments VI	964,861
Orchid Asia VI	1,080,731
Orchid Asia VII	1,349,128
Palladium Equity Partners IV	780,111
Palladium Equity Partners V	4,000,000
Parthenon Investors III	(132,837)
Parthenon Investors IV	(9,506)
Pathway Private Equity Fund III	1,371,878
Pathway Private Equity Fund III-B	1,525,551
Permira VI	2,471,976
Permira VII	3,665,093
Pine Brook Capital Partners II	521,765
Providence Equity Partners VII	585,073
Public Pension Capital	1,307,385
Rhône Partners IV	125,283
Rhône Partners V	3,377,939
Riverside Capital Appreciation Fund VI	(224,053)
Riverside Europe Fund IV	102,943
Riverstone-Carlyle RAE Fund II	78,993
Roark Capital Partners IV	1,132,558
Roark Capital Partners V	4,375,000
Roark Capital Partners VI	755,137
RRJ Capital Master Fund II	221,435
RRJ Capital Master Fund III	862,069
Sherpa Healthcare Co-Investment	100,000
Sherpa Healthcare I	2,186,301
Sherpa Healthcare II	126,370
Tailwind Capital Partners III	852,004
TDR Capital III	618,057
TDR Capital IV	3,357,145
Terra Firma Capital Partner III	116,887
Thoma Bravo Fund XIV	1,239,583
TPG Growth II	31,162
TPG Growth III (A)	1,580,688
TPG Growth IV	2,342,235
TPG Growth V	3,012,553
TPG Healthcare Partners	1,273,245
TPG Partners VII	2,661,929
TPG Partners VIII	5,092,975
USV 2016	209,000
USV 2019	521,250
USV 2021	105,000
USV Climate 2021	45,000
USV Opportunity 2019	106,875
Veritas Capital Fund V	1,858,405
Veritas Capital Fund VI	2,820,789
Veritas Capital Fund VII	4,368,974

Other Supplementary Information
Summary of Investment Fees, Commissions, and Expenses
For the Fiscal Year Ended June 30, 2021

	2021
Private Equity Portfolio Managers (continued)	
Vestar Capital Partners V	$ 121,322
Vista Equity Partners Fund III	101,065
Vista Equity Partners Fund IV	653,294
Vista Equity Partners Fund V	1,962,290
Vista Equity Partners Fund VI	7,500,000
Vista Equity Partners Fund VII	7,500,000
Vista Foundation Fund II	922,133
Vista Foundation Fund III	4,000,000
Vitruvian Investment Partns IV	556,288
WL Ross Recovery Fund V	1,337
Alternatives Portfolio Managers	
Alinda Infrastructure Fund II	316,321
Alterna Core Capital Assets Fund II	930,670
Appian Natural Resources Fund	734,214
Appian Natural Resources Fund II	2,000,000
AQR Multi-Strategy Fund X	4,885,554
Aspect Core Trend HV Fund	6,271,049
BlackRock Style Advantage Onshore	59,071
Blackstone Energy Partners III	2,500,000
Bridgewater Optimal Portfolio	7,834,642
Brookfield Infrastructure Fund III	2,975,811
Brookfield Infrastructure Fund IV	4,133,463
Brookfield Timberlands Fund V	109,856
Digital Colony Partners	2,442,773
EMR Capital Resources Fund II	1,929,605
EnCap Flatrock Midstream Fund III	606,248
EnCap Flatrock Midstream Fund IV	1,695,000
EnerVest Energy Institutional Fund XIV	731,837
EQT Infrastructure III	1,129,709
EQT Infrastructure IV - USD Fund	1,885,000
Fort Global Trend Fund Series A 2020	782,486
Global Infrastructure Partners Capital Solutions Fund	2,312,000
Global Infrastructure Partners II	1,624,471
Global Infrastructure Partners III	5,151,917
Global Infrastructure Partners IV	5,200,000
GMO Systematic Global Macro	1,232,030
Highstar Capital Fund IV	1,842,716
Homestead Capital USA Farmland Fund II	1,284,756
International Infrastructure Finance Company Fund	207,506
LS Power Equity Partners III	1,024,999
LS Power Equity Partners IV	3,750,000
NGP Agribusiness Follow-on Fund	789,476
NGP Natural Resources X	452,270
NGP Natural Resources XI	1,892,614
NGP Natural Resources XII	3744850
NGP Royalty Partners	1,876,018
Northern Shipping Fund III	1,187,924
Northern Shipping Fund IV	2,078,098

	2021
Alternatives Portfolio Managers (continued)	
QL Capital Partners	$ 2,484,375
Reservoir Resource Partners	19,698
Reservoir Strategic Partners Fund	480,504
Silver Creek Aggregate Reserves Fund I	296,572
Starwood Energy Infrastructure Fund III	2,250,500
Stonepeak Infrastructure Fund	698,018
Stonepeak Infrastructure Fund II	3,347,918
Stonepeak Infrastructure Fund III	3,663,211
Stonepeak Infrastructure Fund IV	3,361,111
Taurus Mining Finance Annex Fund	240,033
Taurus Mining Finance Fund	406,112
Taurus Mining Finance Fund II	1,875,000
The Energy & Minerals Group Fund III	1,700,761
Tillridge Global Agribusiness Partners II	1,581,351
Twin Creeks Timber	475,451
Warwick Partners III	2,335,194
Warwick Partners IV	3,994,491
Westbourne Infrastructure Debt 6	671,639
Opportunity Portfolio Managers	
Apollo Credit Opportunity Fund II	5,063
Blackstone Tactical Opportunity Fund	2,004,766
Blackstone Tactical Opportunity Fund II	19,130
Blue Torch Credit Opportunities Fund II	145,195
Clearlake Flagship Plus Partners	187,744
Content Partners Fund 3	615,370
Fidelity Real Estate Opportunistic Income Fund	1,345,588
OHA Tactical Investment Fund	1,158,002
OrbiMed Royalty Opportunities II	128,788
Owl Rock Capital Corp III	187,876
Sanders Capital All Asset Value Fund	3,020,680
Sixth Street Specialty Lending Europe II	323,406
TPG Specialty Lending Europe I (US Feeder)	647,092
TSSP Adjacent Opportunities Partners	3,688,359
TSSP TAO Contingent	582,986
Whitehorse Liquidity Partner IV	1,742,308
Russell Investments - Cash Overlay	888,796
BlackRock - Variable Fund	216,106
IAP Target Date Funds: Alliance Bernstein	3,520,857
IAP Target Date Funds: State Street Bank	405,049
Brokerage Commissions	10,645,693
Consulting and Subscription Fees	8,824,986
State Street Bank:	
Incentive Fee/Carried Interest	309,764,282
Foreign Income Taxes	16,983,370
Operating Expenses[1]	106,616,536
Other Expenses[2]	(14,287,449)
State Treasury Fees	25,061,087
Deferred Compensation Investment Fees and Expenses	5,640,215
Total Investment Fees, Commissions and Expenses	$ 999,681,203

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

INVESTMENT SECTION

OREGON

PERS

75 years of serving
those who serve Oregon

OREGON
STATE
TREASURY

Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

October 25, 2021

Dear PERS Members:

The Investment Division of the Oregon State Treasury (OST) manages a collection of portfolios on behalf of the State, 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 assets of approximately $126.7 billion as of June 30, 2021. This portfolio includes the Oregon Public Employee Retirement Fund (OPERF), which advanced 25.5% last fiscal year, totaled $93.7 billion at June 30, 2021 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 multiple domains, including, but not limited to, several asset classes and geographies. Moreover, OPERF investment strategies have historically produced good results: annualized net returns for the five- and ten-year periods ended June 30, 2021 were 10.5% and 8.8%, respectively[1]. The breadth of diversification that underpins the OPERF portfolio attempts to lower the State's risk in the variability of contribution rates and funded status.

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 six, strategic investment categories: public equity; private equity; real estate; fixed income; risk parity; and other "alternative" and "opportunistic" investments. Return expectations and target allocations for each of these six 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 uncertainty of short-term portfolio return.

For example, in bull market conditions (e.g., 2017), OPERF's equity-oriented portfolio will likely generate strong investment results, but during periods of market duress and/or outright asset price declines (e.g., 2008), OPERF's investment performance will lag long-term expectations and may even register negative returns. Our collective experiences during COVID-19, which continues to this day, and the impact to financial markets is a reminder to us of the risks inherit in the OPERF portfolio. While acknowledging the risks, we can also see the benefits as evidenced by the performance numbers, as provided earlier, as returns across multiple timeframes

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

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Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

exceed estimated returns from prior strategic asset allocation discussions by the Oregon Investment Council and PERS Board.

The U.S. stock market (as measured by the Russell 3000 index) generated strong returns last fiscal year (FY 2021), advancing 44.2% over the 12-month period ended June 30, 2021. With a net gain of 46.9%, OPERF's U.S. public equity portfolio outpaced its Russell 3000 benchmark due to an emphasis on equity "style" factors such as value and small capitalization stocks. Foreign equities continued to lag domestic stocks in FY 2021. OPERF managers investing abroad produced a collective 43.1% gain last fiscal year, better than the 37.2% gain by OPERF's non-U.S. public equity benchmark, the MSCI ACWI Ex-US IMI Net index.

With an estimated fiscal year-end value of $22.6 billion, OPERF's private equity investments represented 25.1% of total OPERF assets at June 30, 2021, and generated a net gain of 44.1% in FY 2021. At 13.7%, average annual returns over the previous 10-year period fell short of the 17.2% return for the benchmark, the Russell 3000 (lagged one quarter) plus 300 basis points, as public markets assets pushed further into a multi-year trend of outperformance relative to private market equivalents.

In real estate, OPERF capital is allocated across four property or security types: core; value-add; opportunistic; and publicly-traded real estate investment trusts (i.e., REITs). In FY 2021, OPERF's real estate investments generated a 8.2% net return, ahead the 1.5% return on OPERF's real estate benchmark, the NCREIF Fund Index – Open End Diversified Core Equity, lagged one quarter. At fiscal year-end, these real estate investments were valued at $9.4 billion, and represented 10.5% of total OPERF assets. For the ten-year period ended June 30, 2021, OPERF's real estate portfolio delivered a net 9.4% on an average annual basis, ahead of the benchmark's 8.7% average annual return during that same period.

Bond markets delivered muted results in FY 2021, unlike in the prior fiscal year that benefited from the U.S. Federal Reserve dramatically lowering the Federal Funds Rate in response to COVID-19. Investments in fixed income securities comprised 16.2% of total OPERF assets at June 30, 2021, and contributed a 1.3% net return in FY 2021, beating the 0.7% return recorded by OPERF's custom fixed income benchmark.

The OIC added Risk Parity to the asset allocation mix in 2019. Risk parity is an investment strategy that strives to balance the risk from various asset classes such that no single asset class dominates the performance of the portfolio. For example, a traditional stocks and bonds portfolio that is allocated 60% to stocks and 40% to bonds is dominated by the risk from stocks. In a risk parity portfolio, the portfolio would be allocated to have equal risk from both stocks and bonds, which likely means that this portfolio will now have a much greater allocation to bonds than stocks. In order to achieve a similar level of return, risk parity portfolios tend to utilize leverage. Performance for this strategy provided for positive return of 21.5% for FY 2021.

Finally, OPERF investments in "alternative" assets and "opportunistic" strategies contributed positive results in FY 2021 (11.5% and 31.5%, respectively). At June 30, 2021, these alternative asset and opportunistic strategies comprised only 11.8% of OPERF's total portfolio.

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STATE
TREASURY

Tobias Read
Oregon State Treasurer

Michael Kaplan
Deputy State Treasurer

Sincerely,

Rex T. Kim

Chief Investment Officer

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OREGON
PERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

Investment Objectives
The function of PERS is to provide present and future retirement or survivor benefits for its members. The investment program comprising the Oregon Public Employees Retirement Fund (OPERF), which includes PERS' Defined Benefit Pension Plan, Oregon Public Service Retirement Plan – Individual Account Program, and other postemployment 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 the PERS Board'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 PERS serves as a non-voting OIC member.

ORS 293.701 defines the investment funds over which OIC has responsibility. Included are the 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 a reference that affirms compliance with applicable nondiscrimination, equal opportunity, and contract compliance laws.

In compliance with ORS 192.630-660, OIC holds its meetings in a public forum. Public notice, including a meeting agenda, is provided to interested persons and news media who 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 https://www.oregon.gov/treasury/invested-for-oregon/Documents/Invested-for-OR-OIC-INV/Invested-for-OR-OIC-INV-1203--Statement-of-Investment-Objectives-and-Policy-Framework.pdf

Investment Results*

	Periods Ended June 30, 2021		
		Annualized	
	1-Year	3-Year	5-Year
Total Portfolio, Excluding Variable Account	25.54 %	10.37 %	10.53 %
OPERF Policy Benchmark[1]	26.89	11.75	11.49
Variable Account	41.29	14.58	14.93
Benchmark: MSCI All Country World Investable Market Index Net	40.94	14.24	14.55
Domestic Stocks	46.86	15.71	16.34
Benchmark: Russell 3000 Index	44.16	18.73	17.89
International Stocks	43.12	11.23	12.66
Benchmark: MSCI All Country World ex-US Investable Market Index Net	37.18	9.42	11.20
Fixed Income Segment	1.27	5.38	3.57
Benchmark: Oregon Custom Index[2]	0.67	5.12	3.18
Risk Parity[3]	21.51	n/a	n/a
Benchmark: S&P Risk Parity - 12% Target Volatility	32.01	n/a	n/a
Real Estate	8.18	6.19	7.10
Benchmark: Oregon Custom Real Estate Benchmark[4]	1.47	3.96	5.26
Private Equity[5]	44.12	18.77	17.31
Benchmark: Russell 3000 Index + 300 bps (Adj.)[6]	67.21	20.59	20.09
Alternatives Portfolio	11.48	(0.72)	2.56
Benchmark: Consumer Price Index + 4%	9.59	6.63	6.51
Opportunity Portfolio	31.52	(0.72)	2.56
Benchmark: Consumer Price Index + 5%	9.59	6.63	6.51

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

[1] From October 1, 2013 to March 31, 2016, the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 23.5% Oregon Custom FI Benchmark, 12.5% NCREIF Property Index quarter lag, 41.5% MSCI ACWI and 2.5% CPI+4%. From April 1, 2016 to June 30, 2016 the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 23.5% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 41.5% MSCI AC World Index and 2.5% CPI+4%. From July 1, 2016 to March 31, 2018 the policy benchmark is 20% Russell 3000+300 Bps quarter lag, 22.5% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 40% MSCI ACWI IMI Net and 5% CPI+4%. From April 1, 2018 to December 31, 2018 the policy benchmark is 19% Russell 3000+300 Bps quarter lag, 22% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 39% MSCI ACWI IMI Net and 7.5% CPI+4%. From January 1, 2019 to June 30, 2020 the policy benchmark is 19% Russell 3000+300 Bps quarter lag, 21% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 37.5% MSCI ACWI IMI Net and 10% CPI+4%. From July 1, 2020 to present the policy benchmark is 19% Russell 3000+300Bps quarter lag, 20% Oregon Custom FI Benchmark, 12.5% Oregon Custom Real Estate Benchmark, 33.5% MSCI ACWI IMI Net, 12.50% CPI+4%, and 2.50% S&P Risk Parity - 12% Target Volatility.

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

[3] Inception date was May 1, 2020.

4 Until March 31, 2016, the Oregon Custom Real Estate Benchmark was weighted 100% the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index QTR Lag. From April 1, 2016 to present, the benchmark is weighted 100% NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE) QTR LAG Net of Fees. Starting July 1, 2017, methodology for monthly return is calculated by geometrically linking prior months returns, and then deriving the monthly returns by calculating the geometric average. Returns are not actual monthly, but rather equivalent for all intra-quarter months, in order to match the actual quarterly return.

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

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

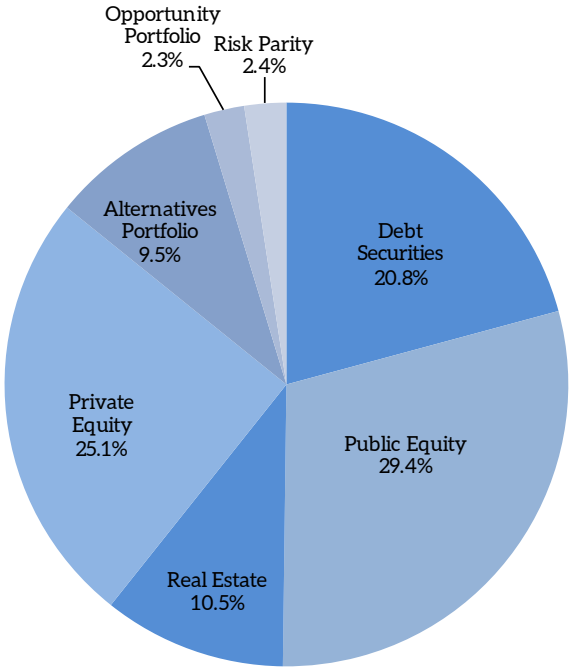
OIC Target and Actual Investment Allocation as of June 30, 2021*

Asset Class/Strategy	OIC Policy Range	OIC Target Allocation	Asset Class/Strategy	Actual Allocation[2]
Debt Securities	15.0 - 25.0 %	20.0 %	Debt Securities	20.8 %
Public Equity	27.5 - 37.5	32.5	Public Equity	29.4
Real Estate	9.5 - 15.5	12.5	Real Estate	10.5
Private Equity	14.0 - 21.0	17.5	Private Equity	25.1
Alternatives Portfolio	7.5 - 17.5	15.0	Alternatives Portfolio	9.5
Opportunity Portfolio[1]	0.0 - 5.0	0.0	Opportunity Portfolio	2.3
Risk Parity	0.0 - 2.5	2.5	Risk Parity	2.4
Total		100.0 %	Total	100.0 %

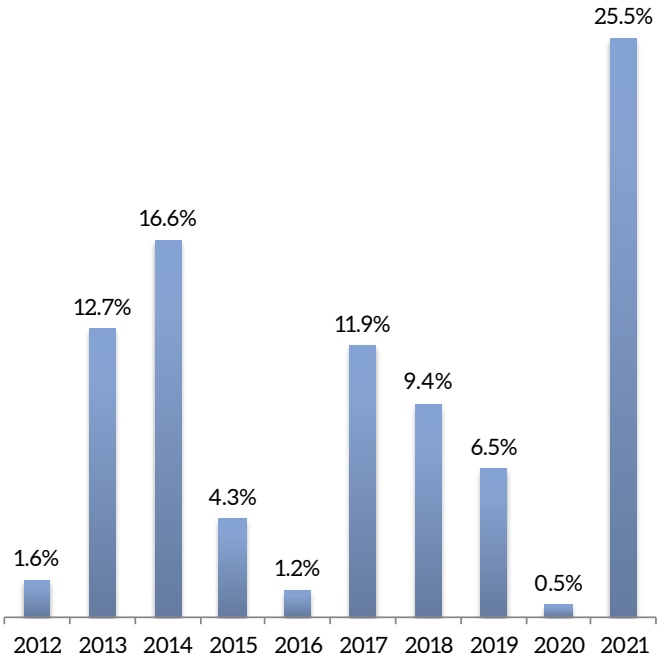
[1]Opportunity Portfolio is an investment strategy and it may be invested up to 5% of total Fund assets.

[2]Based on the actual investment value at 6/30/2021.

Investment Mix by Asset Class/Strategy



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



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

List of Largest Assets Held

Largest Stock Holdings (by Fair Value)
June 30, 2021

Description	Shares	Fair Value
Microsoft Corporation	1,644,581	$ 445,516,993
Apple Inc.	2,605,356	356,829,558
Amazon.com, Inc.	68,014	233,979,042
Facebook Inc. Class A	638,999	222,186,342
Alphabet Inc. Class A	89,471	218,469,393
Alphabet Inc. Class C	84,038	210,626,120
Intel Corporation	3,617,725	203,099,082
AT&T Inc.	6,507,683	187,291,117
Johnson & Johnson	1,094,141	180,248,788
CISCO Systems Inc.	2,924,013	154,972,689

Largest Bond Holdings (by Fair Value)
June 30, 2021

Description	Par Value	Fair Value
US Treasury Note 2.250% Due November 15, 2025	$ 211,200,000	$ 224,697,000
US Treasury Note 0.125% Due April 15, 2022	220,300,000	220,368,844
US Treasury Note 2.250% Due November 15, 2024	159,420,300	168,524,694
US Treasury Note 1.375% Due September 15, 2023	138,400,000	141,735,656
US Treasury Note 2.750% Due November 15, 2047	123,105,300	140,138,073
US Treasury Note 1.375% Due November 15, 2040	155,760,000	139,916,288
US Treasury Note 1.625% Due May 15, 2026	128,359,100	133,047,216
US Treasury Note 1.625% Due February 15, 2026	122,786,200	127,275,570
US Treasury Note 1.875% Due February 15, 2022	124,300,000	125,795,484
US Treasury Note 2.250% Due February 15, 2027	116,348,800	124,352,325

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

Schedule of Fees and Commissions
For the Fiscal Year Ended June 30, 2021

	Assets Under Management	Fees	Percentage
Investment Managers' Fees:			
Debt Securities Managers	$ 16,577,911,142	$ 17,557,644	0.1059 %
Public Equity Managers	33,064,101,068	72,963,272	0.2207
Real Estate Managers	10,151,288,539	74,324,131	0.7322
Private Equity Managers	25,725,638,086	240,298,187	0.9341
Alternatives Portfolio Managers	9,647,953,735	109,486,893	1.1348
Opportunity Portfolio Managers	2,125,974,636	15,802,353	0.7433
Total Assets Under Management	$ 97,292,867,206		
Other Investment Service Fees:			
Investment Consultants		8,824,986	
Commissions and Other Fees		460,423,737	
Total Investment Service and Managers' Fees		**$999,681,203**	

Schedule of Broker Commissions
For the Fiscal Year Ended June 30, 2021

Broker's Name	Commission	Shares / Par	Commission per Share
Goldman, Sachs & Co.	$ 1,767,083	$ 1,309,316,816	$ 0.0013
Instinet	1,547,812	706,458,856	0.0022
Pershing, LLC	706,948	481,600,182	0.0015
Barclays Capital, Inc.	445,977	97,170,554	0.0046
Morgan Stanley & Co. Incorporated	399,387	162,849,776	0.0025
J.P. Morgan	385,512	234,372,993	0.0016
UBS	367,855	136,052,003	0.0027
Citigroup Global Markets	359,189	682,928,678	0.0005
HSBC	329,397	353,008,009	0.0009
Credit Suisse Securities	313,227	109,630,009	0.0029
Jefferies, LLC	288,131	118,836,209	0.0024
BofA Securities, Inc.	279,578	35,101,380	0.0080
Virtu Americas LLC	257,277	35,606,354	0.0072
Merrill Lynch	214,601	117,818,153	0.0018
JonesTrading Institutional Services LLC	185,435	11,113,697	0.0167
Société Générale	179,719	80,511,883	0.0022
Liquidnet	150,113	27,523,465	0.0055
Macquarie Capital	148,325	182,843,982	0.0008
Cowen and Company, LLC	132,661	13,539,461	0.0098
Stifel, Nicolaus & Company, Incorporated	103,677	5,133,478	0.0202

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

Investment Summary

Type of Investment	Fair Value as of June 30, 2021	Percent of Total Fair Value[1]
Debt Securities		
U.S. Government Securities	$ 7,149,256,065	7.35 %
U.S. Agency Securities	1,204,480,150	1.24
International Debt Securities	739,326,524	0.76
Non-U.S. Government Debt Securities	2,056,803,965	2.11
Corporate Bonds	2,685,488,950	2.76
Municipal Bonds	45,470,085	0.04
Asset-Backed Securities	580,502,551	0.60
Guaranteed Investment Contracts[2]	281,278,893	0.29
Domestic Fixed Income Funds	1,019,229,413	1.05
Global Fixed Income Funds	816,074,546	0.84
Total Debt Securities	**16,577,911,142**	**17.04**
Public Equity		
Domestic Equity Securities	14,998,328,814	15.41
International Equity Securities	10,651,705,832	10.95
Domestic Equity Funds	4,347,887,794	4.47
Global Equity Funds	944,926,102	0.97
International Equity Funds	1,242,816,065	1.28
Target Date Funds	878,436,461	0.90
Total Public Equity	**33,064,101,068**	**33.98**
Real Estate	**10,151,288,539**	10.43
Private Equity	**25,725,638,086**	26.44
Alternatives Portfolio[3]	**9,647,953,735**	9.92
Opportunity Portfolio	**2,125,974,636**	2.19
Total Fair Value	**$ 97,292,867,206**	**100.00 %**

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

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

[3] Includes investments held within risk mitigation strategy.

ACTUARIAL SECTION

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PERS

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December 10, 2021

Public Employees Retirement Board
Oregon Public Employees Retirement System

Re: Actuarial Valuation as of December 31, 2020

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, 2020. Our findings are set forth in the system-wide December 31, 2020 Actuarial Valuation report, issued December 9, 2021. Previously, we published a system-wide December 31, 2019 Actuarial Valuation report, which was issued September 17, 2020. Both reports reflect the benefit provisions of the system in effect as of those valuation dates. The December 31, 2020 Actuarial Valuation also includes Senate Bill 111 and House Bill 2906 signed into law in June 2021.

Both the December 31, 2020 Actuarial Valuation and the December 31, 2019 Actuarial Valuation are used to develop information provided in the Annual Comprehensive Financial Report (ACFR) for Oregon PERS. The December 31, 2020 Actuarial Valuation forms the basis for the *Actuarial Section* of the ACFR. The December 31, 2019 Actuarial Valuation is used to develop the financial reporting results required by Governmental Accounting Standards Board (GASB) Statement No. 67 for the Tier 1/Tier 2 and OPSRP programs and by GASB Statement No. 74 for the RHIA and RHIPA programs.

Actuarial Section of the ACFR

The material included in the *Actuarial Section* of ACFR for Oregon PERS is a subset of the results contained in the December 31, 2020 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 ACFR exhibits, and are incorporated herein by reference.

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

The PERB has sole authority to determine the actuarial assumptions and methods used for the valuation. The actuarial assumptions and methods used in both the December 31, 2020 Actuarial Valuation were adopted by the PERB based upon the results of the 2020 Experience Study conducted by Milliman, issued July 20, 2021. The actuarial assumptions and methods used in the December 31, 2019 Actuarial Valuation were adopted by the PERB based upon the

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results of the 2018 Experience Study conducted by Milliman, issued July 24, 2019. The assumptions and methods were selected in a manner consistent with current Actuarial Standards of Practice.

Milliman prepared the following information that is presented in the *Actuarial Section* of the 2021 ACFR based on the December 31, 2020 Actuarial Valuation:

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

We understand the *Actuarial Section* of the ACFR will also include summaries of the actuarial methods, actuarial assumptions, and plan provisions valued. These summaries are contained in the December 31, 2020 Actuarial Valuation.

Financial Reporting Under GASB 67 and GASB 74

Under GASB 67 and GASB 74, the required financial reporting schedules present information using a Measurement Date of the System's fiscal year end. The Total Pension Liability (under GASB 67) and Total OPEB Liability (under GASB 74) for the June 30, 2021 fiscal year end were determined based on the results of the December 31, 2019 Actuarial Valuation. The results of that valuation were adjusted to reflect the long-term expected rate of return assumption and related economic assumptions adopted by the PERS Board with the 2020 Experience Study. The liability calculated at the actuarial valuation date was then adjusted to the Measurement Date using standard actuarial roll-forward procedures. The Total Pension Liability/Total OPEB Liability is compared to the Fiduciary Net Position as of the Measurement Date, as provided by PERS and measured on a fair market value of assets basis, to determine the Net Pension Liability (Asset) under GASB 67 and the Net OPEB Liability (Asset) under GASB 74.

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

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

These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 67 Reporting for Fiscal Year End 2021* letter dated November 19, 2021.

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

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

These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 74 Reporting for Fiscal Year End 2021* letter dated November 23, 2021. The first four exhibits listed above were provided separately for RHIA and RHIPA.

Funding Policy

The funding policy selected by the PERB is to adopt biennial contribution rates in accordance with the results of a "rate-setting" actuarial valuation performed using the assumptions and methods described in the associated actuarial valuation report. For example, the rates developed in the December 31, 2019 Actuarial Valuation were adopted by the PERB and established employer contributions for the July 1, 2021 to June 30, 2023 biennium. Contribution rates include funding the cost associated with new benefit accruals as well as amortizing any unfunded actuarial liability, determined using the market value of assets, over closed, layered amortization periods that vary from 10 to 20 years, according to the benefit program. In accordance with Senate Bill 1049, the unfunded actuarial liability for Tier 1/Tier 2 was reamortized over 22 years as of December 31, 2019. 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, 2020, there are also 127 independent employers who do not pool their Tier 1/Tier 2 experience with the other employers except through the Benefits in Force Reserve, which pools the experience of Tier 1/Tier 2 members in payee status across all employers and all other Tier 1/Tier 2 pooling arrangements.

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

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

Actuarial Basis

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

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System. The December 31, 2019 and December 31, 2020 valuation results were developed using models that employ standard actuarial techniques for pension valuations.

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 October 2021 public meeting.

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

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

The consultants who worked on this assignment are 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 which are consistent with the principles prescribed by the Actuarial Standards Board and the *Code of Professional Conduct* and *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* published by the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Sincerely,

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

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

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Actuarial Methods and Assumptions

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Tier 1/Tier 2 (including Retiree Healthcare)

Actuarial Methods and Valuation Procedures

In October 2021 the Board adopted the following actuarial methods and valuation procedures for the December 31, 2020 and 2021 actuarial valuations of PERS Tier 1/Tier 2 benefits.

Actuarial cost method	**Entry Age Normal.** Under the Entry Age Normal (EAN) cost method, each active member's **entry age present value of projected benefits** is allocated over the member's service from the member's date of entry until their assumed date of exit, taking into consideration expected future compensation increases. Thus, the total pension to which each member is expected to become entitled at retirement is broken down into units, each associated with a year of past or projected future credited service. Typically, when this method is introduced, there will be an initial liability for benefits credited for service prior to that date, and to the extent that the liability is not covered by assets of the plan, there is an unfunded accrued liability to be funded over a stipulated period in accordance with an amortization schedule. A detailed description of the calculation follows: • An individual member's **entry age present value of projected benefits** is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the member's entry age using the projected compensation and service at each separation date. • An individual member's **entry age present value of projected salaries** is the sum of the present value of the projected compensation over the member's working career associated with each possible future separation date, determined at the member's entry age. • An individual member's **present value of projected benefits** is the sum of the present value of the benefit described under the plan at each possible separation date, determined at the valuation date using the projected compensation and service at each separation date. • An individual member's **normal cost** for a certain year is the member's **entry age present value of projected benefits** divided by the member's **entry age present value of projected salaries** and multiplied by the member's projected compensation for the year following the valuation date. • An individual member's **actuarial accrued liability** is the member's **present value of projected benefits** less the sum of the present value of the member's **normal costs** for each future year, determined at the valuation date using the projected compensation and service at each future year. – The plan's **normal cost** is the sum of the individual member normal costs, and the plan's **actuarial accrued liability** is the sum of the individual members' actuarial accrued liabilities.

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Tier 1/Tier 2 UAL amortization	The Tier 1/Tier 2 UAL amortization period was reset to 20 years as of December 31, 2013. Gains and losses between subsequent odd-year valuations have been amortized as a level percentage of projected combined valuation payroll (Tier 1/ Tier 2 plus OPSRP payroll) over a closed 20-year period from the valuation in which they are first recognized. Senate Bill 1049 was signed into law in June 2019 and required a one-time re-amortization of Tier 1/Tier 2 UAL over a closed 22-year period at the December 31, 2019 rate-setting actuarial valuation, which set actuarially determined contribution rates for the 2021-2023 biennium. Future Tier 1/Tier 2 UAL gains or losses will be amortized over 20 years. The closed period amortization under Senate Bill 1049 will continue to decline, and will have 20 years remaining as of the December 31, 2021 rate-setting valuation.
Retiree Healthcare UAL amortization	The UAL for the Retiree Healthcare programs (RHIA and RHIPA) as of December 31, 2007 were amortized as a level percentage of projected combined valuation payroll (Tier 1/ Tier 2 plus OPSRP payroll) over a closed 10-year period. When RHIA or RHIPA are less than 100% funded, gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over a closed 10-year period from the valuation in which they are first recognized. If RHIA or RHIPA are in actuarial surplus (over 100% funded), the surplus is amortized over a rolling 20-year period over Tier 1/Tier 2 payroll. The resulting negative UAL rate will offset the normal cost of the program, but not below 0.00%.
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.

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Contribution rate stabilization method	The UAL Rate component for a rate pool (e.g., Tier 1/Tier 2 SLGRP, Tier 1/Tier 2 School Districts, OPSRP) is confined to a collared range based on the prior biennium's collared UAL Rate component (prior to consideration of side account offsets, SLGRP transition liability or surplus rates, pre-SLGRP liability rate charges or offsets, or member redirect offsets). Collar Width: The rate pool's new UAL Rate component will generally not increase or decrease from the prior biennium's collared UAL Rate component by more than the following amount: • Tier 1/Tier 2 SLGRP and Tier 1/Tier 2 School Districts Pool: 3% of payroll • OPSRP: 1% of payroll • Tier 1/Tier 2 rates for independent employers: greater of 4% of payroll or one-third of the difference between the collared and uncollared UAL Rate at the prior rate-setting valuation. In addition, the UAL Rate will not be allowed to be less than 0.00% of payroll for any Tier 1/Tier 2 independent employer with a funded status (excluding side accounts) less than 100%. UAL Rate decrease restrictions: The UAL Rate component for any rate pool will not decrease from the prior biennium's collared UAL Rate component if the pool's funded status (excluding side accounts) is 87% or lower; the allowable decrease will phase into the full collar width for rate pools between 87% and 90% funded.
Offset for Member Redirect Contributions	Under Senate Bill 1049, a portion of the 6% of pay member contribution otherwise made to the IAP is redirected to fund Tier 1/Tier 2 and OPSRP defined benefits beginning July 1, 2020. For Tier 1/Tier 2 members, the redirected amount is 2.50% of pay, and for OPSRP it is 0.75% of pay. Members with less than $2,500 in monthly pay (indexed in future years) are exempt from the redirection. House Bill 2906 subsequently increased this amount to $3,333 per month effective in 2022. For employer contribution rates shown in this valuation, member redirect contributions are assumed to offset total contribution rates. Reflecting the effect of the monthly pay level-based exemption noted above, the offset is assumed to be 2.40% of total payroll for Tier 1/Tier 2 and 0.65% of total payroll for OPSRP.
Allocation of Liability for Service Segments	For active Tier 1/Tier 2 members who have worked for multiple PERS employers over their career, the calculated actuarial accrued liability is allocated among the employers based on a weighted average of the Money Match methodology, which uses account balance, and the Full Formula methodology, which uses service. The allocation is 10% (0% for police & fire) based on account balance with each employer and 90% (100% for police & fire) based on service with each employer. The entire normal cost is allocated to the current employer.
Allocation of Benefits-In-Force (BIF) Reserve	The BIF reserve is allocated to each rate pool in proportion to the retiree liability attributable to the rate pool.

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Census Data	PERS staff provided the data on plan members and beneficiaries upon which this valuation is based. Milliman did not audit the data, but did review it for reasonableness and consistency with data provided for previous years, in accordance with Actuarial Standard of Practice No. 23. PERS staff assisted in resolving questions and inconsistencies discovered in the data review, and provided updated records or direction for adjusting data as needed. The final census data is expected to be sufficiently accurate and complete for purposes of the actuarial valuation, and we are not aware of any significant concerns or unresolved issues that would materially affect results.
Internal Revenue Code 415 Benefit Limits	Annual benefit limits under Internal Revenue Code 415 are not explicitly reflected in the valuation. In accordance with ORS 238.488, we understand that members whose benefits are restricted by IRC 415 benefit limits are paid the difference between the unrestricted benefit and the IRC 415-restricted benefit from the Public Employee Benefit Equalization Fund.

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Economic Assumptions

The Board adopted the following economic assumptions for the December 31, 2020 and 2021 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2020 Experience Study, published in July 2021. The assumption selection process and rationale is described in detail in that report.

Investment return	6.90% compounded annually
Pre-2014 Interest crediting	8.00% compounded annually on members' regular account balances 8.25% compounded annually on members' variable account balances
Post-2013 Interest crediting	6.90% compounded annually on members' regular account balances 6.90% compounded annually on members' variable account balances
Inflation	2.40% compounded annually
Administrative expenses	$59.0 million per year is added to the total system normal cost and allocated between Tier 1/Tier 2 and OPSRP based on valuation payroll.
Payroll growth	3.40% compounded annually. This assumption represents the sum of the inflation assumption and a real wage growth assumption of 100 basis points.
Healthcare cost trend	Healthcare cost trend rates are used to estimate increases in the RHIPA Maximum Subsidy. The healthcare cost trends are based on the Society of Actuaries (SOA) periodically updated report on long-term medical trends. These rates were developed reflecting the repeal of the Affordable Care Act excise tax by the Further Consolidated Appropriations Act passed in December 2019. Given the substantial uncertainty regarding the impact of COVID-19 on plan costs, including whether the pandemic will increase or decrease costs during the term of our projections, we have chosen not to make an adjustment in the expected plan costs or in the trend assumptions. It is possible that the COVID-19 pandemic could have a material impact on the projected costs.

Year[1]	Rate	Year	Rate
2021	5.9%	2052 – 2060	4.7%
2022	5.5	2061 – 2064	4.6
2023	5.1	2065 – 2066	4.5
2024	5.0	2067	4.4
2025 – 2026	4.9	2068	4.3
2027	4.8	2069 – 2070	4.2
2028 – 2036	4.7	2071	4.1
2037 – 2045	4.8	2072 – 2073	4.0
2045 – 2049	4.9	2074+	3.9
2050 – 2051	4.8		

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

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Demographic Assumptions

The Board adopted the following demographic assumptions for the December 31, 2020 and 2021 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2020 Experience Study, published in July 2021. The study relied on data from an observation period of January 1, 2017 to December 31, 2020, with the exception of the merit scale assumption, which relied on data from 2012 through 2020 (with certain exclusions due to one-off events that are not expected to be indicative of future experience, as detailed in the 2020 Experience Study). Assumptions selected from the study represent an estimate of future experience based on relevant recent experience and reasonable expectations about the future.

Mortality

Healthy Retired Members and Beneficiaries

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

Basic Table	Pub-2010 Healthy Retiree, Sex Distinct, Generational Projection with Unisex Social Security Data Scale	Valuation Year Adopted
School District male	Blend 80% Teachers and 20% General Employees, no set back	2020
Other General Service male*	General Employees, set back 12 months	2018
Police & Fire male	Public Safety, no set back	2018
School District female	Teachers, no set back	2018
Other General Service female**	General Employees, no set back	2018
Police & Fire female	Public Safety, set back 12 months	2018

** 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, 2018 actuarial valuation.

Basic Table	Pub-2010 Disabled Retiree, Sex Distinct, Generational Projection with Unisex Social Security Data Scale
Police & Fire male	Blended 50% Public Safety, 50% Non-Safety, no set back
Other General Service male	Non-Safety, set forward 24 months
Police & Fire female	Blended 50% Public Safety, 50% Non-Safety, no set back
Other General Service female	Non-Safety, set forward 12 months

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Non-Annuitant Members

The following non-annuitant mortality tables were first adopted in the December 31 valuation of the years shown.

Basic Table	Pub-2010 Employee, Sex Distinct, Generational Projection with Unisex Social Security Data Scale	Valuation Year Adopted
School District male	125% of Employee table with same job category and set back as Healthy Retiree assumption	2020
Other General Service male	115% of Employee table with same job category and set back as Healthy Retiree assumption	2018
Police & Fire male	100% of Employee table with same job category and set back as Healthy Retiree assumption	2018
School District female	100% of Employee table with same job category and set back as Healthy Retiree assumption	2018
Other General Service female	125% of Employee table with same job category and set back as Healthy Retiree assumption	2018
Police & Fire female	100% of Employee table with same job category and set back as Healthy Retiree assumption	2018

Retirement Assumptions

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

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

Rates of Retirement from Active Status

The following retirement rate assumptions were first adopted in the December 31, 2020 valuation.

	Police & Fire			General Service			School Districts			
Age	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs	Judges
Less than 50						15.0%			25.0%	
50	1.5%	3.0%	32.0%			15.0%			25.0%	
51	1.5%	3.0%	27.0%			15.0%			25.0%	
52	1.5%	3.0%	27.0%			15.0%			25.0%	
53	1.5%	3.0%	27.0%			15.0%			25.0%	
54	1.5%	3.5%	27.0%			15.0%			25.0%	
55	3.0%	15.5%	27.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
56	3.0%	10.0%	27.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
57	3.0%	10.0%	27.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
58	6.0%	10.0%	27.0%	1.5%	9.0%	21.0%	1.5%	11.0%	27.5%	
59	6.0%	10.0%	27.0%	3.5%	9.0%	21.0%	4.5%	11.0%	27.5%	

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	Police & Fire			General Service			School Districts			
Age	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs	Judges
60	6.0%	12.0%	27.0%	6.0%	11.0%	21.0%	6.5%	12.5%	27.5%	12.0%
61	6.0%	14.0%	27.0%	6.0%	11.0%	21.0%	6.5%	12.5%	27.5%	12.0%
62	15.0%	25.0%	38.0%	13.0%	19.5%	28.5%	15.0%	21.0%	34.0%	12.0%
63	15.0%	15.0%	31.0%	11.5%	16.5%	23.0%	13.0%	19.5%	27.5%	12.0%
64	15.0%	15.0%	31.0%	12.5%	16.5%	23.0%	13.0%	19.5%	27.5%	12.0%
65	40.0%	40.0%	50.0%	19.5%	28.0%	37.5%	25.5%	33.5%	45.0%	12.0%
66	40.0%	40.0%	50.0%	27.5%	36.0%	40.5%	23.0%	36.5%	45.0%	12.0%
67	40.0%	40.0%	50.0%	22.5%	26.5%	34.0%	21.0%	34.5%	38.0%	20.0%
68	40.0%	40.0%	50.0%	19.5%	26.5%	28.5%	21.0%	28.0%	28.5%	20.0%
69	40.0%	40.0%	50.0%	19.5%	26.5%	28.5%	21.0%	28.0%	28.5%	20.0%
70	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
71	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
72	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
73	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
74	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	28.0%	28.5%	30.0%
75 +	100.0%	100.0%	100.0%	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 1, age 60 for Tier 2, age 60 for Judges, and age 55 for Police & Fire) or at the first unreduced retirement age (30 years of service, or age 50 with 25 years of service for Police & Fire).

Lump Sum Option at Retirement

Members retiring may elect to receive a full or partial lump sum at retirement. The probability that a retiring member will elect a lump sum at retirement is summarized in the table below. Due to a continued decline in the number of members selection a total lump sum, this assumption was reduced to zero as part of the rates shown below, which were adopted effective December 31, 2020.

Lump Sum Option at Retirement	
Partial Lump Sum:	2.0% for all years
Total Lump Sum:	0.0% for all years
No Lump Sum:	98.0% for all years

Purchase of Credited Service at Retirement

The following percentages of members are assumed to purchase service credit at time of retirement for the six-month waiting period that occurs prior to establishing membership in the system. These rates were first adopted effective December 31, 2020.

Purchase of Credited Service at Retirement	
Money Match Retirements:	0%
Non-Money Match Retirements:	75%

The cost of the service purchase is estimated based on assumed salary and contribution rates at entry age.

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State Judiciary Member Plan Election

All State Judiciary 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 (non-duty) disability. Duty disability rates are separated between Police & Fire and General Service, while ordinary disability is the same for all members. The rates for ordinary disability and for duty disability for General Service were first adopted effective December 31, 2020. The rates for duty disability for Police & Fire were first adopted effective December 31, 2012.

	Percentage of the 1985 Disability Class 1 Rates
Duty Disability Police & Fire	20%
Duty Disability General Service	0.7%
Ordinary Disability	25% with 0.16% cap

Ordinary disability rates are not applied until the minimum service requirement for non-duty disability benefits is met. Disability rates continue to be applied after retirement eligibility, but not after Normal Retirement Age.

Termination Assumptions

The General Service Female termination assumption was first adopted effective December 31, 2020. The General Service Male termination assumption was first adopted effective December 31, 2018. The School District termination assumptions were first adopted effective December 31, 2016. The Police & Fire termination assumption was first adopted effective December 31, 2014.

Sample termination rates are shown for each group below:

Duration from Hire Date	School District Male	School District Female	General Service Male	General Service Female	Police & Fire
0	16.63%	13.50%	15.00%	15.00%	10.00%
1	14.25%	12.50%	12.50%	14.00%	5.97%
5	6.86%	7.13%	7.19%	7.23%	3.31%
10	3.31%	3.85%	4.13%	4.77%	2.23%
15	2.30%	2.68%	2.93%	3.43%	1.50%
20	1.62%	1.95%	2.08%	2.47%	1.01%
25	1.20%	1.50%	1.47%	1.78%	0.80%
30+	1.20%	1.50%	1.40%	1.40%	0.80%

Termination rates are not applied after a member reaches retirement eligibility. For a complete table of rates, please refer to the 2020 Experience Study report for the System, published in July 2021.

Oregon Residency Post-Retirement

For purposes of determining eligibility for SB 656/HB 3349 benefit adjustments, 85% of retirees are assumed to remain Oregon residents after retirement. This assumption was first adopted effective December 31, 2012.

Police & Fire Unit Purchase

Police & Fire members retiring from active service prior to age 65 are assumed to purchase additional benefit units at an estimated employer matching cost of $4,000.

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Salary Increase Assumptions

The salary increase assumptions reflected in the actuarial valuation include:

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

Merit Scale Increases

Merit scale 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, 2020.

Duration	School District	Other General Service	Police & Fire
0	4.15%	4.06%	5.13%
1	3.92%	3.73%	4.59%
5	2.98%	2.60%	2.87%
10	1.79%	1.52%	1.58%
15	0.72%	0.79%	0.98%
20	-0.11%	0.36%	0.79%
25	-0.55%	0.19%	0.72%
30+	-0.59%	0.18%	0.50%

The assumed merit scale increase for active State Judiciary members is 0.0%.

For a complete table of rates, please refer to the 2020 Experience Study for the System, published in July 2021.

Unused Sick Leave

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

Unused Sick Leave		Valuation year adopted
Actives		
• State General Service Male	8.25%	2020
• State General Service Female	5.00%	2020
• School District Male	9.50%	2020
• School District Female	6.50%	2020
• Local General Service Male	7.25%	2020
• Local General Service Female	4.50%	2020
• State Police & Fire	4.25%	2020
• Local Police & Fire	7.50%	2020
Dormant Members	5.00%	2020

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Vacation Pay

Members eligible to include a lump sum payment of unused vacation pay in their final average salary calculation at time of retirement 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, 2020, except the school district assumption which was adopted effective December 31, 2012 and the state police & fire assumption, which was adopted effective December 31, 2018.

Vacation Pay	
Tier 1	
• State General Service	2.50%
• School District	0.25%
• Local General Service	3.50%
• State Police & Fire	2.75%
• Local Police & Fire	4.75%
Tier 2	0.00%

Retiree Healthcare Participation

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

Retiree Healthcare Participation	
RHIPA	
• 8 – 9 years of service	10.0%
• 10 – 14 years of service	10.0%
• 15 – 19 years of service	11.0%
• 20 – 24 years of service	14.0%
• 25 – 29 years of service	22.0%
• 30+ years of service	27.0%
RHIA	
• Healthy Retired	27.5%
• Disabled Retired	15.0%

The participations rates were adopted December 31, 2020.

Spouse Assumptions

Non-annuitant death benefits are valued assuming all members are married. Future participants in RHIA and RHIPA are assumed to have eligible spouses. For these purposes, the spouse is assumed to be three years younger than a male member or three years older than a female member.

Actuarial Equivalence Assumptions

Early retirement factors and optional form conversion factors are assumed to remain level in all future years.

For members with pop-up annuities, the future amount payable if the spouse predeceases the member is estimated based on an assumed 0.90 optional form conversion factor for 100% contingent annuities and an assumed 0.94 optional form conversion factor for 50% contingent annuities.

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OPSRP

Most of the methods and assumptions adopted for the OPSRP valuation are the same as those used for Tier 1/Tier 2. The methods and assumptions that differ for OPSRP are summarized below. The Board adopted the following methods, procedures and assumptions for the December 31, 2020 and December 31, 2021 actuarial valuations.

Actuarial Methods and Valuation Procedures

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

Economic Assumptions

Administrative expenses	$59.0 million per year is added to the total system normal cost and allocated between Tier 1/Tier 2 and OPSRP based on valuation payroll.

Demographic Assumptions

Rates of Retirement from Active Status

	Police & Fire			General Service			School Districts		
Age	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs
50	0.5%	1.5%	5.5%						
51	0.5%	1.5%	5.5%						
52	0.5%	1.5%	5.5%						
53	0.5%	1.5%	27.0%						
54	0.5%	1.5%	27.0%						
55	2.0%	5.0%	27.0%	1.0%	2.5%	5.0%	0.5%	2.5%	5.0%
56	2.0%	5.0%	27.0%	1.0%	2.5%	5.0%	0.5%	2.5%	5.0%
57	2.0%	5.0%	27.0%	1.0%	2.5%	7.5%	1.0%	2.5%	7.5%
58	5.0%	5.0%	27.0%	1.5%	3.0%	30.0%	1.5%	3.0%	30.0%
59	5.0%	5.0%	27.0%	2.0%	3.0%	25.0%	1.5%	3.0%	25.0%
60	5.0%	15.0%	27.0%	2.5%	3.75%	20.0%	2.5%	3.75%	20.0%
61	5.0%	8.5%	27.0%	2.5%	5.0%	20.0%	2.5%	5.0%	20.0%
62	10.0%	25.0%	38.0%	6.5%	12.0%	30.0%	6.0%	12.0%	30.0%
63	7.0%	15.0%	31.0%	6.5%	10.0%	20.0%	6.0%	10.0%	20.0%
64	7.0%	15.0%	31.0%	6.5%	10.0%	20.0%	6.0%	10.0%	20.0%
65	7.0%	35.0%	40.0%	15.5%	35.0%	20.0%	12.5%	35.0%	20.0%
66	7.0%	35.0%	40.0%	18.5%	33.0%	20.0%	12.5%	33.0%	20.0%
67	7.0%	35.0%	40.0%	17.0%	22.0%	30.0%	11.0%	22.0%	30.0%
68	7.0%	35.0%	40.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
69	7.0%	35.0%	40.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%

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	Police & Fire			General Service			School Districts		
Age	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs
70	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
71	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
72	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
73	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
74	100.0%	100.0%	100.0%	14.0%	20.0%	25.0%	9.0%	20.0%	25.0%
75 +	100.0%	100.0%	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 their Normal Retirement Age.

Disability Assumptions

Assumed disability rates are not applied to OPSRP members after they reach Normal Retirement Age.

Cost of living increases for the adjusted salary used to calculate retirement benefits for disabled OPSRP members are estimated based on the valuation inflation assumption.

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

A summary of key changes implemented since the December 31, 2019 valuation are described briefly below.

Changes in Actuarial Methods and Allocation Procedures

- The rate collar methodology was revised to only restrict changes in the UAL Rate component and to narrow the width of allowable changes. The collar width varies depending on the rate pool, and no decrease in UAL Rate is allowed unless a funded status threshold is met.
- The UAL Rate amortization methodologies for the RHIA and RHIPA programs were changed to allow a limited rate offset when a program is in an actuarial surplus position (over 100% funded).
- The assumed system-average level of member redirect contributions to Tier 1/Tier 2 and OPSRP was updated to 2.40% (Tier 1/Tier 2) and 0.65% (OPSRP) to reflect the projected effects of House Bill 2906.

Changes in Economic Assumptions

- The long-term inflation assumption was lowered from 2.50% to 2.40% and the system payroll growth assumption was lowered from 3.50% to 3.40%.
- Assumed average annual future long-term investment return was lowered from 7.2% to 6.9%.
- Interest crediting on regular and variable member accounts was also lowered to 6.90%.
- Assumed administrative expenses were updated and changed to a combined assumption for both Tier 1/Tier 2 and OPSRP.

Changes in Demographic Assumptions

- The base mortality assumption was changed for School District males.
- The mortality improvement projection scale applied to all groups is based on 60-year unisex average mortality improvement rates by age. The assumption was updated to reflect the most recent publicly available data at the time of the latest experience study. For a complete table of rates, please refer to the 2020 Experience Study for the System, published in July 2021.
- Termination, disability and retirement rates were updated for some groups to more closely match observed and anticipated future experience.
- Assumptions for merit increases, unused sick leave, and vacation pay were updated.
- The assumed healthcare cost trend rates for the RHIPA program as well as the participation assumptions for both RHIA and RHIPA were updated.

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Accounting / ACFR Exhibits

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Accounting/ACFR Exhibits

The following information as of December 31, 2020 has been prepared and provided to Oregon PERS for inclusion in the Actuarial Section of the 2021 Annual Comprehensive Financial Report (ACFR):

- 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

These exhibits do not reflect GASB Statements No. 74 and 75, which were issued by GASB in June 2015 to replace Statements No. 43 and 45, and govern financial reporting for postemployment benefits other than pensions. GASB 74 governs plan reporting effective for fiscal years beginning after June 15, 2016, while GASB 75 governs employer reporting for fiscal years beginning after June 15, 2017. Milliman provided results for Oregon PERS under GASB 74 and 75 determined as of a June 30, 2020 measurement date in letters dated November 24, 2020 and March 12, 2021, respectively. The results for a measurement date of June 30, 2021 will be provided separately.

These exhibits do not reflect GASB Statements No. 67 and 68, issued by GASB in June 2012 to replace Statements No. 25 and 27. GASB 67 governs plan financial reporting effective for fiscal years beginning after June 15, 2013, while GASB 68 governs employer financial reporting for fiscal years beginning after June 15, 2014. Milliman provided results for Oregon PERS under GASB 67 and 68 determined as of a June 30, 2020 measurement date in letters dated November 24, 2020 and March 12, 2021, respectively. The results for a measurement date of June 30, 2021 will be provided separately.

Some employers have made supplemental deposits in addition to their regularly scheduled contributions. These deposits are placed in a side account within the pension trust and used to offset future contribution requirements of that employer. The Schedules of Funding Progress and Solvency Test include side accounts as part of the Plan's assets since those amounts are in a restricted trust available exclusively for the benefit of plan members.

Milliman is not an accounting or audit firm and cannot provide accounting advice. Milliman is not responsible for the interpretation of, or compliance with, accounting standards; citations to, and descriptions of accounting standards provided in this report are for reference purposes only. The information provided in this section is intended to assist Oregon PERS in completing its financial statements, but any accounting determination should be reviewed by your auditor.

The exhibits are provided on the following pages.

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Actuarial Schedules

Schedule of Active Member Valuation Data

Valuation Date	Count	Annual Payroll (Thousands)	Average Annual Pay	% Increase in Average Pay	Number of Participating Employers[1]	
12/31/1993	137,513	$4,466,797	$32,483		N/A	
12/31/1995	141,471	$4,848,058	$34,269	5.5%	N/A	
12/31/1997	143,194	$5,161,562	$36,045	5.2%	N/A	
12/31/1999	151,262	$5,676,606	$37,528	4.1%	N/A	
12/31/2000	156,869	$6,195,862	$39,497	5.2%	N/A	
12/31/2001	160,477	$6,520,225	$40,630	2.9%	N/A	Old Basis
12/31/2001	160,477	$6,253,965	$38,971	—	N/A	New Basis[2]
12/31/2002	159,287	$6,383,475	$40,075	2.8%	N/A	
12/31/2003	153,723	$6,248,550	$40,648	1.4%	N/A	
12/31/2004	142,635	$6,306,447	$44,214	8.8%	806	
12/31/2005 [3]	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	
12/31/2015	168,177	$9,544,132	$56,751	2.6%	804	
12/31/2016	172,483	$9,872,557	$57,238	0.9%	805	
12/31/2017	173,002	$10,098,889	$58,374	2.0%	802	
12/31/2018	176,763	$10,851,980	$61,393	5.2%	798	
12/31/2019	180,757	$11,533,740	$63,808	3.9%	802	
12/31/2020	180,685	$12,042,602	$66,650	4.5%	797	

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

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

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

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Actuarial Schedules

Schedule of Retirees and Beneficiaries Added to and Removed from Rolls

Annual Allowances are shown in thousands.

Valuation Date	Added to Rolls		Removed from Rolls		Rolls - End of Year		% Increase in Annual Allowances[2]	Average Annual Allowances
	Count	Annual Allowances[1]	Count	Annual Allowances	Count	Annual Allowances		
12/31/1993					60,841	$564,341	27.6%	$9,276
12/31/1995					64,796	$700,171	24.1%	$10,806
12/31/1997					69,624	$919,038	31.3%	$13,200
12/31/1999					82,819	$1,299,380	41.4%	$15,689
12/31/2000					82,458	$1,385,556	6.6%	$16,803
12/31/2001					85,216	$1,514,491	9.3%	$17,772
12/31/2002					89,482	$1,722,865	13.8%	$19,254
12/31/2003					97,777	$2,040,533	8.4%	$20,869
12/31/2004 [3]	6,754	$149,474	2,863	$35,151	101,668	$2,154,856	5.6%	$21,195
12/31/2005 [3]	4,472	$149,127	3,217	$36,784	102,923	$2,267,198	5.2%	$22,028
12/31/2006 [3]	5,060	$151,240	3,263	$39,735	104,720	$2,378,704	4.9%	$22,715
12/31/2007 [3]	5,385	$183,232	3,304	$40,590	106,801	$2,521,345	6.0%	$23,608
12/31/2008 [3]	5,963	$171,484	3,626	$47,062	109,138	$2,645,767	4.9%	$24,242
12/31/2009 [3]	6,377	$226,713	3,374	$46,228	112,141	$2,826,252	6.8%	$25,203
12/31/2010 [3]	6,359	$217,424	3,512	$51,627	114,988	$2,992,048	5.9%	$26,021
12/31/2011 [3]	8,715	$282,098	3,679	$55,633	120,024	$3,218,514	7.6%	$26,816
12/31/2012 [3]	7,023	$235,917	4,875	$59,353	122,172	$3,395,079	5.5%	$27,789
12/31/2013	9,724	$307,551	3,644	$66,607	128,252	$3,636,023	7.1%	$28,351
12/31/2014 [4]	6,910	$235,250	3,524	$66,621	131,638	$3,804,651	4.6%	$28,902
12/31/2015 [4]	8,566	$304,818	3,781	$73,305	136,423	$4,036,165	6.1%	$29,586
12/31/2016 [4]	6,413	$242,372	3,931	$80,903	138,905	$4,197,633	4.0%	$30,219
12/31/2017 [4]	10,075	$385,197	3,878	$83,921	145,102	$4,498,910	7.2%	$31,005
12/31/2018	7,856	$297,542	3,933	$90,107	149,025	$4,706,345	4.6%	$31,581
12/31/2019	8,200	$322,057	4,124	$95,486	153,101	$4,932,915	4.8%	$32,220
12/31/2020	7,747	$320,438	4,587	$112,806	156,261	$5,140,547	4.2%	$32,897

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

[2] *Since last valuation date.*

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

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

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Actuarial Schedules

Schedule of Funding Progress by Rate Pool

The liabilities and assets resulting from the last six actuarial valuations are as follows *(dollar amounts in millions)*

Actuarial Valuation Date	Actuarial Value of Assets[1,2] (a)	Actuarial Accrued Liability (AAL)[2] (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll[3] (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Tier 1/Tier 2 State & Local Government Rate Pool						
12/31/2015 [4]	$30,185.3	$38,396.8	$8,211.5	78.6%	$2,691.8	305.1%
12/31/2016	$30,417.6	$40,351.3	$9,933.7	75.4%	$2,546.7	390.1%
12/31/2017 [4]	$33,366.0	$42,150.7	$8,784.7	79.2%	$2,410.6	364.4%
12/31/2018	$31,798.9	$43,149.3	$11,350.4	73.7%	$2,299.5	493.6%
12/31/2019 [4]	$34,060.0	$44,122.1	$10,062.1	77.2%	$2,183.5	460.8%
12/31/2020	$34,408.2	$46,382.2	$11,974.0	74.2%	$2,089.0	573.2%
Tier 1/Tier 2 School District Rate Pool						
12/31/2015	$22,728.9	$27,670.7	$4,941.8	82.1%	$1,578.8	313.0%
12/31/2016	$22,870.2	$29,152.2	$6,282.0	78.5%	$1,532.7	409.9%
12/31/2017	$24,934.4	$29,677.4	$4,743.1	84.0%	$1,443.7	328.5%
12/31/2018	$23,557.9	$29,898.4	$6,340.6	78.8%	$1,401.2	452.5%
12/31/2019	$25,091.5	$30,274.5	$5,183.0	82.9%	$1,330.2	389.6%
12/31/2020	$25,345.4	$31,486.0	$6,140.6	80.5%	$1,250.4	491.1%
Tier 1/Tier 2 Independent Employers and Judiciary						
12/31/2015 [4]	$4,807.6	$6,327.1	$1,519.5	76.0%	$460.3	330.1%
12/31/2016	$4,856.6	$6,690.8	$1,834.3	72.6%	$437.3	419.5%
12/31/2017 [4]	$5,018.2	$6,536.3	$1,518.1	76.8%	$392.6	386.7%
12/31/2018	$4,756.2	$6,736.3	$1,980.1	70.6%	$375.4	527.5%
12/31/2019 [4]	$5,061.3	$6,916.0	$1,854.7	73.2%	$360.3	514.8%
12/31/2020	$5,155.0	$7,373.8	$2,218.8	69.9%	$347.9	637.8%
OPSRP Rate Pool						
12/31/2015	$2,389.1	$3,742.5	$1,353.5	63.8%	$4,813.3	28.1%
12/31/2016	$3,021.4	$4,717.0	$1,695.6	64.1%	$5,355.8	31.7%
12/31/2017	$4,116.5	$5,634.7	$1,518.2	73.1%	$5,852.0	25.9%
12/31/2018	$4,783.0	$6,738.0	$1,955.0	71.0%	$6,775.9	28.9%
12/31/2019	$6,190.4	$8,082.2	$1,891.8	76.6%	$7,659.8	24.7%
12/31/2019	$7,548.8	$10,008.1	$2,459.3	75.4%	$8,355.3	29.4%
Postemployment Healthcare Benefits - Retirement Health Insurance Account						
12/31/2015	$419.3	$465.6	$46.3	90.0%	$4,730.8	1.0%
12/31/2016	$465.0	$463.7	($1.3)	100.3%	$4,516.7	(0.0%)
12/31/2017	$553.3	$437.6	($115.7)	126.4%	$4,246.9	(2.7%)
12/31/2018	$570.7	$411.7	($159.1)	138.6%	$4,076.1	(3.9%)
12/31/2019	$644.1	$403.9	($240.3)	159.5%	$3,873.9	(6.2%)
12/31/2020	$660.2	$383.6	($276.6)	172.1%	$3,687.3	(7.5%)
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account						
12/31/2015	$11.2	$67.8	$56.6	16.5%	$1,339.4	4.2%
12/31/2016	$19.1	$67.9	$48.8	28.1%	$1,276.0	3.8%
12/31/2017	$29.8	$69.4	$39.5	43.0%	$1,212.2	3.3%
12/31/2018	$38.5	$62.7	$24.3	61.3%	$1,159.5	2.1%
12/31/2019	$51.9	$59.3	$7.4	87.5%	$1,120.6	0.7%
12/31/2020	$63.6	$48.0	($15.6)	132.6%	$1,091.8	(1.4%)

Notes:

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

[2] *Excludes effect of Multnomah Fire District (net UAAL of $129 million as of 12/31/2020).*

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

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

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Actuarial Schedules

Solvency Test

Pension and Retiree Healthcare Plans Combined
(dollar amounts in millions)

The schedule below shows results from the defined benefit pension plans and retiree healthcare plans on a consolidated basis. Results are also shown separately for each program: Tier 1/Tier 2, OPSRP, and retiree healthcare. Note that the defined benefit pension plan constitutes over 99% of the consolidated assets and liabilities.

	Actuarial Accrued Liability[1]				Portion of Actuarial Accrued Liabilities Covered by Assets		
Valuation Date[2]	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets[1,3]	(1)	(2)	(3)
12/31/2011 [5]	$7,779.7	$37,362.4	$16,551.8	$50,412.4	100%	100%	32%
12/31/2012 [4]	$7,704.9	$36,759.3	$16,473.1	$55,080.1	100%	100%	64%
12/31/2013 [5]	$7,120.1	$39,531.5	$16,476.8	$60,372.9	100%	100%	83%
12/31/2014 [6]	$6,950.4	$46,576.7	$20,470.8	$61,798.3	100%	100%	40%
12/31/2015 [5]	$6,476.8	$49,158.7	$21,094.5	$60,430.6	100%	100%	23%
12/31/2016	$6,168.1	$52,232.7	$23,101.0	$61,543.2	100%	100%	14%
12/31/2017 [5]	$5,585.9	$55,636.9	$23,340.3	$67,909.2	100%	100%	29%
12/31/2018	$5,153.6	$57,297.7	$24,597.8	$65,411.5	100%	100%	12%
12/31/2019 [5]	$4,907.4	$59,461.0	$25,540.5	$71,008.3	100%	100%	26%
12/31/2020	$4,517.1	$63,068.9	$28,146.0	$73,102.1	100%	100%	20%

[1] *Includes effect of Multnomah Fire District (net UAAL of $129 million as of 12/31/2020).*
[2] *An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.*
[3] *Includes the value of UAL Lump Sum Side Accounts.*
[4] *The 12/31/2012 valuation reflects the benefit changes enacted by the 2013 Oregon Legislature in Senate Bills 822 and 861, as well as a change in cost method to Entry Age Normal.*
[5] *Reflects the transfer in assets and liabilities for newemployers that joined the SLGRP effective January 1 following the valuation date.*
[6] *The 12/31/2014 valuation reflects benefit changes from the Oregon Supreme Court's ruling in Moro v. State of Oregon, which overturned portions of Senate Bills 822 and 861.*

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Actuarial Schedules

Solvency Test

Tier 1/Tier 2 Pension

(dollar amounts in millions)

Valuation Date[2]	Actuarial Accrued Liability[1] Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets[1,3]	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2011 [5]	$7,779.7	$37,001.1	$15,431.2	$49,327.7	100%	100%	29%
12/31/2012 [4]	$7,704.9	$36,377.3	$14,527.4	$53,594.0	100%	100%	65%
12/31/2013 [5]	$7,120.1	$39,116.2	$14,114.1	$58,384.0	100%	100%	86%
12/31/2014 [6]	$6,950.4	$46,113.5	$17,331.0	$59,370.6	100%	100%	36%
12/31/2015 [5]	$6,476.8	$48,641.5	$17,335.7	$57,611.0	100%	100%	14%
12/31/2016	$6,168.1	$51,655.5	$18,429.6	$58,037.6	100%	100%	1%
12/31/2017 [5]	$5,585.9	$54,967.4	$17,868.1	$63,209.7	100%	100%	15%
12/31/2018	$5,153.6	$56,534.9	$18,148.3	$60,019.3	100%	97%	0%
12/31/2019 [5]	$4,907.4	$58,567.8	$17,888.4	$64,121.8	100%	100%	4%
12/31/2020	$4,517.1	$62,012.8	$18,762.4	$64,829.5	100%	97%	0%

[1] *Includes effect of Multnomah Fire District (net UAAL of $129 million as of 12/31/2020).*

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

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

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

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

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

OPSRP Pension

(dollar amounts in millions)

Valuation Date[1]	Actuarial Accrued Liability Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2011	$0.0	$15.2	$971.3	$840.5	100%	100%	85%
12/31/2012 [2]	$0.0	$28.6	$1,766.9	$1,190.0	100%	100%	66%
12/31/2013	$0.0	$51.2	$2,192.1	$1,630.2	100%	100%	72%
12/31/2014 [3]	$0.0	$92.4	$2,971.6	$2,024.6	100%	100%	65%
12/31/2015	$0.0	$144.6	$3,597.9	$2,389.1	100%	100%	62%
12/31/2016	$0.0	$201.1	$4,515.9	$3,021.4	100%	100%	62%
12/31/2017	$0.0	$310.1	$5,324.5	$4,116.5	100%	100%	71%
12/31/2018	$0.0	$419.0	$6,318.9	$4,783.0	100%	100%	69%
12/31/2019	$0.0	$554.3	$7,527.9	$6,190.4	100%	100%	75%
12/31/2020	$0.0	$726.1	$9,282.0	$7,548.8	100%	100%	74%

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

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

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

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Retiree Healthcare (RHIA and RHIPA)

(dollar amounts in millions)

Retiree Health Insurance Account (RHIA)							
	Actuarial Accrued Liability						
Valuation Date[1]	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2011	$0.0	$332.5	$128.6	$239.6	100%	72%	0%
12/31/2012[2]	$0.0	$338.3	$133.5	$291.6	100%	86%	0%
12/31/2013	$0.0	$348.0	$125.6	$353.5	100%	100%	4%
12/31/2014	$0.0	$355.1	$113.3	$395.9	100%	100%	36%
12/31/2015	$0.0	$357.7	$107.9	$419.3	100%	100%	57%
12/31/2016	$0.0	$361.7	$102.0	$465.0	100%	100%	101%
12/31/2017	$0.0	$343.9	$93.7	$553.3	100%	100%	224%
12/31/2018	$0.0	$329.8	$81.8	$570.7	100%	100%	294%
12/31/2019	$0.0	$326.9	$77.0	$644.1	100%	100%	412%
12/31/2020	$0.0	$319.3	$64.3	$660.2	100%	100%	530%

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

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

Retiree Health Insurance Premium Account (RHIPA)							
	Actuarial Accrued Liability						
Valuation Date[1]	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)	Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets (1)	(2)	(3)
12/31/2011	$0.0	$13.6	$20.8	$4.5	100%	33%	0%
12/31/2012[2]	$0.0	$15.1	$45.3	$4.4	100%	29%	0%
12/31/2013	$0.0	$16.1	$45.1	$5.2	100%	33%	0%
12/31/2014	$0.0	$15.7	$54.9	$7.2	100%	46%	0%
12/31/2015	$0.0	$14.9	$52.9	$11.2	100%	75%	0%
12/31/2016	$0.0	$14.4	$53.5	$19.1	100%	100%	9%
12/31/2017	$0.0	$14.4	$53.5	$19.1	100%	100%	9%
12/31/2018	$0.0	$14.0	$48.8	$38.5	100%	100%	50%
12/31/2019	$0.0	$12.1	$47.2	$51.9	100%	100%	84%
12/31/2020	$0.0	$10.8	$37.2	$63.6	100%	100%	142%

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

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

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Actuarial Schedules

Analysis of Financial Experience

The schedule below shows results from the defined benefit pension plans and retiree healthcare plans on a consolidated basis. Results are also shown separately for each program on subsequent pages.

Gains and Losses in Unfunded Accrued Liability Resulting from Differences Between Assumed Experience and Actual Experience and Assumption Changes

(dollar amounts in millions)

Pension and Retiree Healthcare Plans	$ Gain (or Loss) for Year	
	2020	2019
Type of Activity		
Retirements from Active Status	($52.9)	($119.4)
Active Mortality and Withdrawal	(49.7)	(38.4)
Pay Increases	12.1	(213.4)
Contributions	230.3	111.8
Interest Crediting Experience	(20.3)	(85.7)
Investment Income	1.3	3,547.4
Retirement, Mortality and Lump Sums from Inactive Status	7.4	7.0
Retiree and Beneficiary Mortality	95.7	5.1
New Entrants[1]	(89.6)	(110.3)
Other	104.5	79.1
Gain (or Loss) During Year from Financial Experience	**$238.9**	**$3,183.2**
Non-Recurring Items		
Assumption Changes	(3,249.0)	0.0
Plan Changes	(198.7)	0.0
Composite Gain (or Loss) During Year	**($3,208.8)**	**$3,183.2**

[1] *Accrued liability associated with new entrants is shown. For a full assessment of the new entrant effect on UAL, this would need to be combined with contributions associated with new entrants.*

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The schedules below show results from the Tier 1/Tier 2 and OPSRP pension programs separately.

Gains and Losses in Unfunded Accrued Liability Resulting from Differences between Assumed Experience and Actual Experience and Assumption Changes

(dollar amounts in millions)

Tier 1/Tier 2 Pension Program	$ Gain (or Loss) for Year	
	2020	2019
Type of Activity		
Retirements from Active Status	($52.6)	($119.0)
Active Mortality and Withdrawal	(18.6)	(14.6)
Pay Increases	4.1	(75.5)
Contributions	177.9	60.8
Interest Crediting Experience	(20.3)	(85.7)
Investment Income	(41.8)	3,207.6
Retirement, Mortality and Lump Sums from Inactive Status	5.5	4.4
Retiree and Beneficiary Mortality	93.6	3.5
New Entrants	(1.4)	(4.3)
Other	54.7	68.4
Gain (or Loss) During Year from Financial Experience	**$201.3**	**$3,045.5**
Non-Recurring Items		
Assumption Changes	(2,722.2)	0.0
Plan Changes	(133.6)	0.0
Composite Gain (or Loss) During Year	**($2,654.6)**	**$3,045.5**

OPSRP Pension Program	$ Gain (or Loss) for Year	
	2020	2019
Type of Activity		
Retirements from Active Status	($0.4)	($0.3)
Active Mortality and Withdrawal	($31.1)	(23.8)
Pay Increases	$8.0	(137.9)
Contributions	$51.0	45.7
Investment Income	$42.0	301.8
Retirement, Mortality and Lump Sums from Inactive Status	$1.9	2.5
Retiree and Beneficiary Mortality	$2.0	1.6
New Entrants[1]	($88.2)	(106.0)
Other	$34.3	(0.5)
Gain (or Loss) During Year from Financial Experience	**$19.6**	**$83.2**
Non-Recurring Items		
Assumption Changes	($542.7)	0.0
Plan Changes	($65.0)	0.0
Composite Gain (or Loss) During Year	**($588.1)**	**$83.2**

Accrued liability associated with new entrants is shown. For a full assessment of the new entrant effect on UAL, this would need to be combined with contributions associated with new entrants.

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The schedule below shows results from the retiree healthcare programs.

Gains and Losses in Unfunded Accrued Liability Resulting from Differences Between Assumed Experience and Actual Experience and Assumption Changes

(dollar amounts in millions)

	$ Gain (or Loss) for Year			
	RHIA		RHIPA	
Retiree Healthcare Programs	2020	2019	2020	2019
Type of Activity				
Contributions	$0.7	$4.3	$0.6	$1.0
Investment Income	0.7	35.7	0.5	2.3
Other	11.5	6.4	4.0	4.8
Gain (or Loss) During Year from Financial Experience	**$12.9**	**$46.4**	**$5.1**	**$8.1**
Non-Recurring Items				
Assumption Changes	7.1	0.0	8.9	0.0
Plan Changes	0.0	0.0	0.0	0.0
Composite Gain (or Loss) During Year	**$20.0**	**$46.4**	**$14.0**	**$8.1**

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Actuarial Schedules

Schedules of Funding Progress
(dollar amounts in millions)

Actuarial Valuation Date	Actuarial Value of Assets[1] (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Pension Benefits - Tier 1/Tier 2 and OPSRP[2]						
12/31/2011 [3]	$50,168.2	$61,198.4	$11,030.2	82.0%	$8,550.5	129.0%
12/31/2012 [4]	$54,784.1	$60,405.2	$5,621.1	90.7%	$8,590.9	65.4%
12/31/2013 [3]	$60,014.1	$62,593.6	$2,579.5	95.9%	$8,671.8	29.7%
12/31/2014 [5]	$61,395.2	$73,458.9	$12,063.7	83.6%	$9,115.8	132.3%
12/31/2015 [3]	$60,000.1	$76,196.6	$16,196.5	78.7%	$9,544.1	169.7%
12/31/2016	$61,059.0	$80,970.3	$19,911.2	75.4%	$9,872.6	201.7%
12/31/2017 [3]	$67,326.1	$84,056.1	$16,730.0	80.1%	$10,098.9	165.7%
12/31/2018	$64,802.3	$86,574.7	$21,772.4	74.9%	$10,852.0	200.6%
12/31/2019 [3]	$70,312.3	$89,445.7	$19,133.5	78.6%	$11,533.7	165.9%
12/31/2020	$72,378.3	$95,300.4	$22,922.1	75.9%	$12,042.6	190.3%
Postemployment Healthcare Benefits - Retirement Health Insurance Account						
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	$120.0	74.7%	$8,671.8	1.4%
12/31/2014	$395.9	$468.4	$72.5	84.5%	$9,115.8	0.8%
12/31/2015	$419.3	$465.6	$46.3	90.0%	$9,544.1	0.5%
12/31/2016	$465.0	$463.7	($1.3)	100.3%	$9,872.6	(0.0%)
12/31/2017	$553.3	$437.6	($115.7)	126.4%	$10,098.9	(1.1%)
12/31/2018	$570.7	$411.7	($159.1)	138.6%	$10,852.0	(1.5%)
12/31/2019	$644.1	$403.9	($240.3)	159.5%	$11,533.7	(2.1%)
12/31/2020	$660.2	$383.6	($276.6)	172.1%	$12,042.6	(2.3%)
Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account						
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	$55.9	8.6%	$2,531.5	2.2%
12/31/2014	$7.2	$70.5	$63.3	10.2%	$2,718.9	2.3%
12/31/2015	$11.2	$67.8	$56.6	16.5%	$2,831.8	2.0%
12/31/2016	$19.1	$67.9	$48.8	28.1%	$2,881.4	1.7%
12/31/2017	$29.8	$69.4	$39.5	43.0%	$2,984.5	1.3%
12/31/2018	$38.5	$62.7	$24.3	61.3%	$3,211.6	0.8%
12/31/2019	$51.9	$59.3	$7.4	87.5%	$3,479.8	0.2%
12/31/2020	$63.6	$48.0	($15.6)	132.6%	$3,712.6	(0.4%)

Notes:

[1] *Side account assets are included with pension assets.*

[2] *Includes UAAL for Multnomah Fire District ($129 million as of 12/31/2020).*

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

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

[5] *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.*

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Summary of Plan Provisions

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Summary of Plan Provisions

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

Membership	All employees of public employers participating in this System who are in qualifying positions become members of the System after completing six months of service except those who are eligible for and have elected to participate in an optional retirement plan. Different benefit provisions of the plan apply based on date of hire.	
	Tier 1	Hired prior to 1996
	Tier 2	Hired after 1995 and before August 29, 2003
	OPSRP	Hired after August 28, 2003, and neither a judge nor a former Tier 1/Tier 2 member eligible to reestablish Tier 1/Tier 2 membership
	Judges	Members of the State Judiciary
Member Contributions	**Judges**	7% of salary
	All others	Prior to January 1, 2004, Tier 1/Tier 2 members contributed 6% of salary to member accounts. Effective July 1, 2020: 2.50% of salary for Tier 1/Tier 2 members and 0.75% of salary for OPSRP members (only applicable to members earning at least $2,500 per month, indexed for inflation and further increased to $3,333 per month effective in 2022) are contributed to Employee Pension Stability Accounts (EPSA). EPSA balances will not affect the calculation of Money Match or Formula Plus Annuity benefits.
Employer Contributions	Set by the PERS Board based on actuarial calculations that follow Board rate-setting policies for employers.	

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

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

Normal Retirement Allowance

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

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

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

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

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

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

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

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

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Final Average Salary

The greater of:

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

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

For Tier 2 members, covered salary is limited by Internal Revenue Code 401(a)(17). The limit was $280,000 in 2019. Tier 1 members are not subject to this limit.

Under Senate Bill 1049, passed during the 2019 legislative session, the salary included in the determination of Final Average Salary will be limited for all members beginning in 2020. The limit will be equal to $195,000 in 2020, and will be indexed with inflation in later years. For this purpose, payment due to the unused sick leave program will not be affected by the Final Average Salary limit. However, lump sum payments of unused vacation time for Tier 1 members will be included in total salary subject to the limit.

Creditable Service

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

Prior Service Pension

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

SB 656/HB 3349 Adjustment

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

SB 656 Increase

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

HB 3349 Increase

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

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Early Retirement Eligibility	**Police and Fire**	Age 50 or 30 years of service
	Judges	Age 60
	General Service	Age 55 or 30 years of service
Early Retirement Allowance	Normal retirement allowance, actuarially reduced to early retirement age. However, there is no reduction applied if a member has completed 30 years of service (25 years for police & fire members) or for judges in Plan B.	
Vesting	Contributions made in any part of five calendar years or attainment of age 50 (45 for police & fire) while working in a qualifying position.	
Termination Benefits	**Non-Vested**	Payment of member's account balance.
	Vested	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.
Optional Forms of Retirement Allowance	The normal form of benefit is a cash refund annuity (joint and two-thirds survivor contingent annuity for a married judge). All optional amounts are adjusted to be actuarially equivalent. **Options Available** • Life annuity • Cash refund annuity • Life annuity guaranteed 15 years • Joint and 50% or 100% survivor contingent annuity, with or without pop-up feature • Partial Lump Sum: Refund of member contribution account balance plus a pension (under any optional form) of employer-paid portion of the Full Formula or Money Match annuity. • Total Lump Sum: Refund of member contribution account plus a matching employer amount.	
Preretirement Death Benefit Eligibility	**Judges**	Six or more years of service.
	All others	Death occurring while the member is an employee of a participating employer or within 120 days of termination provided the employee does not withdraw the account balance or retire, or a result of injuries received while in the service of a participating employer.
Preretirement Death Benefit	**Judges**	The spouse shall receive a life pension equal to two-thirds of the service retirement allowance. The beneficiary of an unmarried judge shall receive the member's accumulated contributions with interest.
	All others	The member's account balance plus a matching employer amount. If the beneficiary is the member's spouse, they may instead elect to receive the following benefit: • If the member was eligible for retirement, the actuarial equivalent of the retirement benefit the member was eligible to receive at date of death. • If the member was not eligible for retirement, 50% of the actuarial equivalent of the retirement benefit the member would have been eligible to receive if they had terminated employment on their date of death and retired at the earliest possible date.

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Additional Police & Fire Death Benefits	Upon the death of a retired police officer or firefighter, the surviving spouse or dependent children under age 18 will receive a monthly benefit based on 25% of the cash refund retirement allowance due to police and fire service.	
Disability Benefit Eligibility	**Duty**	Disability occurring as a direct result of a job-related injury or illness, regardless of length of service.
	Non-Duty	Disability occurring after ten years of service (six years, if a judge), but prior to normal retirement eligibility.
Disability Benefits	The normal retirement allowance calculated based on the service credit that would have been earned if the member had continued working to age 58 (age 55 for police and fire, age 65 for judge members) payable commencing immediately. **Fire and Police Members' Alternative** In lieu of the above, firefighters and police officers who qualify for duty disability may elect to receive a benefit of 50% of final average monthly salary at the time of disablement. **Minimum Monthly Retirement Allowance**	
	Judges	45% of final average monthly salary.
	All others	$100 for a member with at least 15 years of creditable service, actuarially reduced if an optional form of benefit is chosen.
	Reduction of Benefits Whenever a disabled employee's disability benefit and earned income for any month exceed the monthly salary received at the time of disablement or $400, if greater, the disability benefit will be reduced by the excess. For Tier Two members, the disability benefit may not exceed the member's salary at the time of disablement.	
Waiting Time Service Purchases	Members with at least 10 years of combined credited and/or prior service under PERS may elect to purchase service credit for the six-month "waiting time" period worked prior to establishing membership in the system. The waiting time purchase is interest-free and must be purchased in one payment prior to retirement.	
Police & Fire Unit Purchases	Police & fire members may purchase 60-month annuity benefits (up to $80 per month) that must be paid out by age 65 and cannot commence prior to the earliest retirement age. The amount purchased by the member is matched by the employer. In certain situations, such as termination of employment prior to retiring, or working beyond age 65, the employer's matching purchase is forfeited.	
Automatic Postretirement Cost of Living Adjustments (COLAs)	All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in *Moro v. State of Oregon*, automatic postretirement adjustments are based on a blended COLA as described below.	
	Automatic COLA prior to SB 822 and SB 861	Benefits were adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics. The maximum adjustment to be made for any year was 2% of the previous year's benefit. Any CPI change in excess of the limit was accumulated for future benefit adjustments which would otherwise be less than the limit. No benefit was decreased below its original amount.

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	Automatic Adjustments Provided by Senate Bills 822 and 861	This legislation, passed in 2013, provided for that benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first $60,000 of annual benefit and 0.15% on amounts above $60,000 of annual benefit.
	Blended COLA after *Moro* decision	The Supreme Court decision in *Moro* requires that members "will be entitled to receive during retirement a blended COLA rate that reflects the different COLA provisions applicable to benefits earned at different times." The Supreme Court did not articulate a specific methodology for determining the blended COLA. For purposes of this valuation, we have determined the blend based on creditable service earned before and after October 2013. This approach is consistent with OAR 459-005-0510 adopted by the PERS Board in September 2015.
Ad Hoc Adjustments	From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits.	
Variable Annuity Program	**Contributions**	Prior to January 1, 2004, members could elect to have 25, 50 or 75 percent of their contributions invested in the variable account.
	Benefit	At retirement, members may elect to receive a variable annuity with the funds accumulated in their variable account. Alternatively, members may elect to have all or a portion of the funds in their variable account transferred back to the regular account and receive an annuity from the System as though no variable annuity program existed. The employer-provided benefit, however, is based on the earnings the member would have received in the regular account.
Interest Credit on Member Accounts	**Tier 1 Regular**	Actuarially assumed rate of return until the rate guarantee reserve has been fully funded for three consecutive years and the Board elects to credit additional interest.
	Tier 2 Regular	Amount determined by the Board based on actual investment earnings of the regular account.
	Variable	Actual earnings in variable account.
Retiree Healthcare – Medicare Supplement (RHIA)	**Retiree Eligibility**	All of the following must be met: (a) Currently receiving a retirement allowance from the System, (b) Covered for eight years before retirement, (c) Enrolled in a PERS-sponsored health plan, and (d) Enrolled in both Medicare Part A and Part B.

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	Surviving Spouse or Dependent Eligibility	A surviving spouse or dependent of a deceased RHIA-eligible retiree is eligible for RHIA benefits if they are enrolled in both Medicare Part A and Part B, and *either* of the following criteria are met: (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health insurance at the time of the retiree's death and the deceased retiree retired before May 1, 1991.
	Benefit Amount	A monthly contribution of up to $60 per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.
Retiree Healthcare – Under Age 65 (RHIPA)	**Retiree Eligibility**	Retired PERS members who were state employees at the time of retirement, are enrolled in a PERS-sponsored health plan, and are not eligible for Medicare.
	Surviving Spouse or Dependent Eligibility	A surviving spouse or dependent of a deceased RHIPA-eligible retiree is eligible for RHIPA benefits if they are not yet eligible for Medicare, and *either* of the following criteria are met: (a) Currently receiving a retirement allowance from the System, or (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health plan at the time of the retiree's death and the deceased retiree retired on or after September 29, 1991.
	Benefit	A percentage (as shown in the table below) of the maximum monthly subsidy based on years of service. The maximum monthly subsidy is calculated annually as the average difference between the health insurance premiums paid by active state employees and the premium retirees would pay if they were rated separately from active state employees. The maximum monthly subsidy for 2020 is $428.17 per month.

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

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Changes in Plan Provisions	Senate Bill 111, signed on June 1, 2021, increased the optional death benefit available to a surviving spouse when a retirement-eligible member dies. Previously, this benefit was based on 50% of the actuarial equivalent value of the member's retirement benefit, but this was increased to 100% of the actuarial equivalent value.

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Summary of Chapter 238A Provisions — OPSRP

Normal Retirement Date	**Police & Fire**	Age 60 or age 53 with 25 years of retirement credit
	General Service	Age 65 or age 58 with 30 years of retirement credit
	School Districts	Age 65 or age 58 with 30 calendar years of active membership
Normal Retirement Allowance	A single life annuity equal to final average salary times years of retirement credit attributable to service as fire and police times 1.8% plus final average salary times all other years of retirement credit times 1.5%.	
Final Average Salary	The greater of: • Average salary earned during the three calendar years in which the member was paid the highest salary, even if one of those years is less than a full calendar year. • Total salary earned over the last 36 months of employment divided by the actual months of service during that 36 month period. Covered salary for this purpose includes base pay, plus overtime up to an average amount, plus bonuses, plus member contributions paid by the employer on a salary reduction basis. Excludes payments of unused vacation or accumulated sick leave at retirement, and member contributions "assumed and paid" by the employer. For OPSRP members, covered salary is limited by Internal Revenue Code 401(a)(17) The limit was $280,000 in 2019. Under Senate Bill 1049 passed during the 2019 legislative session, the salary included in the determination of Final Average Salary will be limited for all members beginning in 2020. The limit will be equal to $195,000 in 2020, and will be indexed with inflation in later years.	
Early Retirement Eligibility	**Police & Fire**	Age 50 and 5 years of vesting service
	General Service	Age 55 and 5 years of vesting service
Early Retirement Allowance	Normal retirement allowance, actuarially reduced to early retirement age.	
Vesting	Five years or attainment of normal retirement age.	
Vested Termination Benefit	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.	
Optional Forms of Retirement Benefit	The normal form of benefit is a life annuity. All optional amounts are adjusted to be actuarially equivalent. **Options Available** • Life annuity • Joint and 50% or 100% survivor contingent benefit, with or without pop-up feature • Lump sum if monthly normal retirement benefit is less than $200 or if lump sum value is less than $5,000.	
Preretirement Death Benefit Eligibility	Death of a vested member before retirement benefits begin.	

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Preretirement Death Benefit	If the member was eligible for retirement, the actuarial equivalent of the retirement benefit the member was eligible to receive at date of death. If the member was not eligible for retirement, 50% of the actuarial equivalent of the retirement benefit the member would have been eligible to receive if they had terminated employment on their date of death and retired at the earliest possible date.	
Disability Benefit Eligibility	**Duty**	Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service.
	Non-Duty	Disablement occurring after ten years of service, but prior to normal retirement eligibility.
Disability Benefit Amounts	**Preretirement Benefit**	45% of salary during last full month of employment before disability, reduced if the total benefit exceeds 75% of salary. Benefit is payable monthly until normal retirement age.
	Retirement Benefit	Same formula as Normal Retirement Benefit, except: Final average salary is adjusted to reflect cost-of-living increases from date of disability to normal retirement age, and Retirement credits continue to accrue from date of disability to normal retirement age.
Postretirement Adjustments	All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in *Moro v. State of Oregon*, automatic postretirement adjustments are based on a blended COLA as described below.	
	Automatic COLA prior to SB 822 and SB 861	Benefits were adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics. The maximum adjustment to be made for any year was 2% of the previous year's benefit. Any CPI change in excess of the limit was accumulated for future benefit adjustments which would otherwise be less than the limit. No benefit was decreased below its original amount.
	Automatic Adjustments Provided by Senate Bills 822 and 861	This legislation, passed in 2013, provided for that benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first $60,000 of annual benefit and 0.15% on amounts above $60,000 of annual benefit.
Changes in Plan Provisions	Senate Bill 111, signed on June 1, 2021, increased the death benefit payable to a surviving spouse when a retirement-eligible member dies. Previously, the benefit was based on 50% of the actuarial equivalent value of the member's retirement benefit, but this was increased to 100% of the actuarial equivalent value.	

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those who serve Oregon

STATISTICAL SECTION

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Statistical Notes

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

Financial Trends

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

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

The Schedule of 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.

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

Operating Information

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

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

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

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

The Schedule of Retirement System Membership shows demographics of membership over a period of time. The fiscal year schedule shows membership over the last eight 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, 2021, to show public employers of the state of Oregon participating in PERS.

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

Defined Benefit Pension Plan

Fiscal Year	Member Contributions	Employer Contributions: Dollars [1]	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total[1]
2012	$ 16,534,650	$ 1,455,729,689	9.69 %	$ 380,749,755	$ 1,853,014,094
2013	16,985,722	834,161,587	10.26	6,949,742,064	7,800,889,373
2014	15,319,270	915,236,878	10.54	9,886,700,639	10,817,256,787
2015	13,785,439	1,123,256,703	12.25	2,364,479,372	3,501,521,514
2016	14,214,341	977,332,329	10.37	413,915,853	1,405,462,523
2017	13,177,984	1,022,201,249	10.18	7,660,055,575	8,695,434,808
2018	12,558,631	1,390,111,534	13.84	6,247,472,490	7,650,142,655
2019	11,354,366	1,720,183,341	16.21	4,010,048,029	5,741,585,736
2020	10,179,238	2,299,006,203	18.99	923,260,755	3,232,446,196
2021	9,881,501	2,161,450,927	17.67	18,975,671,457	21,147,003,885

Employee Pension Stability Accounts

Fiscal Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2021	$ 150,427,846	$ N/A	N/A %	$ 22,744,173	$ 173,172,019

Oregon Public Service Retirement Plan
Individual Account Program

Fiscal Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2012	$ 516,174,983	$ N/A	N/A %	$ 71,535,911	$ 587,710,894
2013	510,796,006	N/A	N/A	635,350,054	1,146,146,060
2014	527,303,202	N/A	N/A	977,439,367	1,504,742,569
2015	563,417,649	N/A	N/A	276,949,224	840,366,873
2016	566,450,233	N/A	N/A	76,509,002	642,959,235
2017	605,277,281	N/A	N/A	948,360,842	1,553,638,123
2018	622,296,460	N/A	N/A	772,501,114	1,394,797,574
2019	647,139,479	N/A	N/A	565,351,952	1,212,491,431
2020	711,193,387	N/A	N/A	242,628,243	953,821,630
2021	578,414,037	N/A	N/A	2,560,936,405	3,139,350,442

Deferred Compensation Plan

Fiscal Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2012	$ 80,632,698	$ N/A	N/A %	$ 9,841,830	$ 90,474,528
2013	74,248,188	N/A	N/A	135,572,819	209,821,007
2014	92,174,335	N/A	N/A	203,181,598	295,355,933
2015	99,796,739	N/A	N/A	48,617,428	148,414,167
2016	107,286,636	N/A	N/A	3,166,856	110,453,492
2017	121,701,967	N/A	N/A	189,041,478	310,743,445
2018	134,259,568	N/A	N/A	169,577,769	303,837,337
2019	139,543,729	N/A	N/A	104,963,768	244,507,497
2020	150,478,458	N/A	N/A	73,406,068	223,884,526
2021	151,995,862	N/A	N/A	630,011,342	782,007,204

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

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

Defined Benefit Pension Plan

Fiscal Year	Benefits	Administrative Expenses[1]	Refunds	Total[1]
2012	$ 3,295,709,818	$ 33,102,667	$ 34,020,450	$ 3,362,832,935
2013	3,556,059,999	33,505,928	17,439,568	3,607,005,495
2014	3,837,870,411	31,247,350	25,560,094	3,894,677,855
2015	3,927,167,032	35,739,837	16,481,215	3,979,388,084
2016	4,193,307,712	40,567,225	13,154,578	4,247,029,515
2017	4,346,282,735	43,546,184	15,961,744	4,405,790,663
2018	4,642,717,844	37,751,319	13,876,294	4,694,345,457
2019	4,815,058,600	38,403,320	11,903,642	4,865,365,562
2020	5,045,931,154	52,083,371	18,855,297	5,116,869,822
2021	5,237,137,595	59,083,920	11,934,465	5,308,155,980

Employee Pension Stability Accounts

Fiscal Year	Benefits	Administrative Expenses	Refunds	Total
2021	$ -	$ 480	$ N/A	$ 480

Oregon Public Service Retirement Plan
Individual Account Program

Fiscal Year	Benefits	Administrative Expenses	Refunds	Total
2012	$ 224,729,644	$ 7,698,098	$ N/A	$ 232,427,742
2013	241,326,511	7,093,871	N/A	248,420,382
2014	330,535,801	6,934,980	N/A	337,470,781
2015	319,978,740	7,565,611	N/A	327,544,351
2016	364,549,091	8,478,008	N/A	373,027,099
2017	417,119,098	9,481,014	N/A	426,600,112
2018	546,866,343	12,309,768	N/A	559,176,111
2019	490,459,364	12,568,466	N/A	503,027,830
2020	611,602,249	11,828,627	N/A	623,430,876
2021	577,899,925	12,827,760	N/A	590,727,685

Deferred Compensation Plan

Fiscal Year	Benefits	Administrative Expenses	Refunds	Total
2012	$ 61,465,377	$ 417,776	$ N/A	$ 61,883,153
2013	70,550,942	874,584	N/A	71,425,526
2014	89,652,030	997,202	N/A	90,649,232
2015	84,177,564	1,018,468	N/A	85,196,032
2016	91,351,490	1,202,786	N/A	92,554,276
2017	97,089,531	1,330,947	N/A	98,420,478
2018	116,331,317	1,469,816	N/A	117,801,133
2019	123,057,988	2,278,273	N/A	125,336,261
2020	118,349,853	2,071,770	N/A	120,421,623
2021	136,614,998	2,419,306	N/A	139,034,304

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

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

Defined Benefit Pension Plan

Fiscal Year	Additions	Deductions	Net Change	Net Position[1] Beginning of Year	Net Position[1] End of Year
2012	$ 1,853,014,094	$ 3,362,832,935	$ (1,509,818,841)	$ 55,794,848,695	$ 54,285,029,854
2013	7,800,889,373	3,607,005,495	4,193,883,878	54,285,029,854	58,478,913,732
2014	10,817,256,787	3,894,677,855	6,922,578,932	58,478,913,732	65,401,492,664
2015	3,501,521,514	3,979,388,084	(477,866,570)	65,401,492,664	64,923,626,094
2016	1,405,462,523	4,247,029,515	(2,841,566,992)	64,923,626,094	62,082,059,102
2017	8,695,434,808	4,405,790,663	4,289,644,145	62,082,059,102	66,371,703,247
2018	7,650,142,655	4,694,345,457	2,955,797,198	66,371,703,247	69,327,500,445
2019	5,741,585,736	4,865,365,562	876,220,174	69,327,500,445	70,203,720,619
2020	3,232,446,196	5,116,869,822	(1,884,423,626)	70,203,720,619	68,319,296,993
2021	21,147,003,885	5,308,155,980	15,838,847,905	68,319,296,993	84,158,144,898

Employee Pension Stability Accounts

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2021	$ 173,172,019	$ 480	$ 173,171,539	$ 0	$ 173,171,539

Oregon Public Service Retirement Plan
Individual Account Program

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2012	$ 587,710,894	$ 232,427,742	$ 355,283,152	$ 4,036,836,648	$ 4,392,119,800
2013	1,146,146,060	248,420,382	897,725,678	4,392,119,800	5,289,845,478
2014	1,504,742,569	337,470,781	1,167,271,788	5,289,845,478	6,457,117,266
2015	840,366,873	327,544,351	512,822,522	6,457,117,266	6,969,939,788
2016	642,959,235	373,027,099	269,932,136	6,969,939,788	7,239,871,924
2017	1,553,638,123	426,600,112	1,127,038,011	7,239,871,924	8,366,909,935
2018	1,394,797,574	559,176,111	835,621,463	8,366,909,935	9,202,531,398
2019	1,212,491,431	503,027,830	709,463,601	9,202,531,398	9,911,994,999
2020	953,821,630	623,430,876	330,390,754	9,911,994,999	10,242,385,753
2021	3,139,350,442	590,727,685	2,548,622,757	10,242,385,753	12,791,008,510

Deferred Compensation Plan

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2012	$ 90,474,528	$ 61,883,153	$ 28,591,375	$ 1,104,976,256	$ 1,133,567,631
2013	209,821,007	71,425,526	138,395,481	1,133,567,631	1,271,963,112
2014	295,355,933	90,649,232	204,706,701	1,271,963,112	1,476,669,813
2015	148,414,167	85,196,032	63,218,135	1,476,669,813	1,539,887,948
2016	110,453,492	92,554,276	17,899,216	1,539,887,948	1,557,787,164
2017	310,743,445	98,420,478	212,322,967	1,557,787,164	1,770,110,131
2018	303,837,337	117,801,133	186,036,204	1,770,110,131	1,956,146,335
2019	244,507,497	125,336,261	119,171,236	1,956,146,335	2,075,317,571
2020	223,884,526	120,421,623	103,462,903	2,075,317,571	2,178,780,474
2021	782,007,204	139,034,304	642,972,900	2,178,780,474	2,821,753,374

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

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

Retirement Health Insurance Account

Fiscal Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2012	N/A	$ 46,464,958	0.54 %	$ 3,023,553	$ 49,488,511
2013	N/A	47,294,060	0.57	35,636,711	82,930,771
2014	N/A	48,253,398	0.56	56,194,217	104,447,615
2015	N/A	53,648,437	0.59	15,606,876	69,255,313
2016	N/A	44,587,963	0.47	4,246,552	48,834,515
2017	N/A	49,785,501	0.50	57,566,224	107,351,725
2018	N/A	47,997,918	0.48	50,869,212	98,867,130
2019	N/A	49,615,345	0.47	35,959,368	85,574,713
2020	N/A	6,359,609	0.06	8,595,287	14,954,896
2021	N/A	2,963,356	0.02	171,822,210	174,785,566

Retiree Health Insurance Premium Account

Fiscal Year	Member Contributions	Employer Contributions Dollars	Employer Contributions Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2012	N/A	$ 3,378,230	0.13 %	$ 16,723	$ 3,394,953
2013	N/A	3,443,805	0.14	499,279	3,943,084
2014	N/A	6,149,608	0.24	739,056	6,888,664
2015	N/A	6,887,258	0.25	266,949	7,154,207
2016	N/A	10,966,837	0.39	228,057	11,194,894
2017	N/A	11,863,776	0.39	2,027,506	13,891,282
2018	N/A	13,290,145	0.45	2,383,184	15,673,329
2019	N/A	14,009,075	0.45	2,455,173	16,464,248
2020	N/A	11,241,801	0.32	772,391	12,014,192
2021	N/A	11,724,345	0.31	16,296,899	28,021,244

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

Retirement Health Insurance Account

Fiscal Year	Benefits[1]	Administrative Expenses	Refunds	Total
2012	$ 29,935,920	$ 963,843	N/A	$ 30,899,763
2013	30,777,470	1,149,475	N/A	31,926,945
2014	34,112,567	1,044,937	N/A	35,157,504
2015	31,922,820	1,279,427	N/A	33,202,247
2016	33,602,540	1,256,017	N/A	34,858,557
2017	31,186,802	1,288,059	N/A	32,474,861
2018	32,503,140	1,281,744	N/A	33,784,884
2019	32,234,400	1,312,229	N/A	33,546,629
2020	31,827,780	1,272,953	N/A	33,100,733
2021	31,334,950	1,287,002	N/A	32,621,952

Retiree Health Insurance Premium Account

Fiscal Year	Benefits[1]	Administrative Expenses	Refunds	Total
2012	$ 3,885,769	$ 71,981	N/A	$ 3,957,750
2013	4,093,736	169,137	N/A	4,262,873
2014	4,925,743	170,901	N/A	5,096,644
2015	4,230,808	188,598	N/A	4,419,406
2016	4,682,975	259,850	N/A	4,942,825
2017	4,327,944	285,895	N/A	4,613,839
2018	4,659,536	277,596	N/A	4,937,132
2019	4,486,752	318,425	N/A	4,805,177
2020	4,112,640	252,995	N/A	4,365,635
2021	3,672,820	292,231	N/A	3,965,051

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

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

Retirement Health Insurance Account

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2012	$ 49,488,511	$ 30,899,763	$ 18,588,748	$ 247,991,029	$ 266,579,777
2013	82,930,771	31,926,945	51,003,826	266,579,777	317,583,603
2014	104,447,615	35,157,504	69,290,111	317,583,603	386,873,714
2015	69,255,313	33,202,247	36,053,066	386,873,714	422,926,780
2016	48,834,515	34,858,557	13,975,958	422,926,780	436,902,738
2017	107,351,725	32,474,861	74,876,864	436,902,738	511,779,602
2018	98,867,130	33,784,884	65,082,246	511,779,602	576,861,848
2019	85,574,713	33,546,629	52,028,084	576,861,848	628,889,932
2020	14,954,896	33,100,733	(18,145,837)	628,889,932	610,744,095
2021	174,785,566	32,621,952	142,163,614	610,744,095	752,907,709

Retiree Health Insurance Premium Account

Fiscal Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2012	$ 3,394,953	$ 3,957,750	$ (562,797)	$ 5,122,179	$ 4,559,382
2013	3,943,084	4,262,873	(319,789)	4,559,382	4,239,593
2014	6,888,664	5,096,644	1,792,020	4,239,593	6,031,613
2015	7,154,207	4,419,406	2,734,801	6,031,613	8,766,414
2016	11,194,894	4,942,825	6,252,069	8,766,414	15,018,483
2017	13,891,282	4,613,839	9,277,443	15,018,483	24,295,926
2018	15,673,329	4,937,132	10,736,197	24,295,926	35,032,123
2019	16,464,248	4,805,177	11,659,071	35,032,123	46,691,194
2020	12,014,192	4,365,635	7,648,557	46,691,194	54,339,751
2021	28,021,244	3,965,051	24,056,193	54,339,751	78,395,944

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

Defined Benefit Pension Plan

Calendar Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2011	$ 15,771,376	$ 593,451,757	6.85 %	$ 1,189,044,156	$ 1,798,267,289
2012	14,148,372	862,934,319	10.99	7,201,022,711	8,078,105,402
2013	18,664,061	1,496,033,607	17.68	8,595,803,270	10,110,500,938
2014	13,200,528	937,788,619	10.48	4,342,718,450	5,293,707,597
2015	14,362,049	1,127,799,421	12.25	1,232,493,098	2,374,654,568
2016	13,085,105	976,297,293	10.17	4,290,378,888	5,279,761,286
2017	14,668,384	1,179,420,962	10.77	9,343,076,932	10,537,166,278
2018	10,447,081	1,745,401,831	16.96	226,842,118	1,982,691,030
2019	11,373,682	2,019,260,325	18.27	8,608,031,425	10,638,665,432
2020	9,600,323	2,094,082,795	17.72	5,070,001,230	7,173,684,348

Employee Pension Stability Accounts

Calendar Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2020	$ 62,303,384	$ N/A	N/A %	$ 5,109,277	$ 67,412,661

Oregon Public Service Retirement Plan Individual Account Program

Calendar Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2011	$ 518,199,449	$ N/A	N/A %	$ 96,058,972	$ 614,258,421
2012	499,094,923	N/A	N/A	623,896,684	1,122,991,607
2013	542,566,655	N/A	N/A	814,928,040	1,357,494,695
2014	511,048,423	N/A	N/A	450,087,155	961,135,578
2015	596,936,756	N/A	N/A	140,226,970	737,163,726
2016	597,188,543	N/A	N/A	518,172,223	1,115,360,766
2017	613,683,342	N/A	N/A	1,213,845,362	1,827,528,704
2018	638,930,679	N/A	N/A	(61,712,368)	577,218,311
2019	687,121,432	N/A	N/A	1,247,407,081	1,934,528,513
2020	635,159,734	N/A	N/A	865,754,220	1,500,913,954

Deferred Compensation Plan

Calendar Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2011	$ 75,619,604	$ N/A	N/A %	$ 35,406,816	$ 111,026,420
2012	78,115,678	N/A	N/A	105,067,553	183,183,231
2013	88,901,454	N/A	N/A	207,310,080	296,211,534
2014	92,495,435	N/A	N/A	102,188,822	194,684,257
2015	97,373,493	N/A	N/A	15,087,160	112,460,653
2016	109,040,225	N/A	N/A	83,913,037	192,953,262
2017	120,454,924	N/A	N/A	212,359,507	332,814,431
2018	144,365,735	N/A	N/A	62,553,479	206,919,214
2019	144,923,289	N/A	N/A	217,040,897	361,964,186
2020	145,621,685	N/A	N/A	386,028,153	531,649,838

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

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

Defined Benefit Pension Plan

Calendar Year	Benefits	Administrative Expenses	Refunds	Intraccount Transfers	Total
2011	$ 3,351,517,947	$ 29,244,166	$ 38,369,101	$ -	$ 3,419,131,214
2012	3,351,430,408	31,807,897	17,970,250	-	3,401,208,555
2013	3,708,827,767	34,271,919	25,529,913	-	3,768,629,599
2014	3,888,166,333	35,187,183	17,850,587	-	3,941,204,103
2015	4,068,416,728	37,333,754	15,932,985	-	4,121,683,467
2016	4,248,984,127	41,936,746	14,931,267	-	4,305,852,140
2017	4,495,375,698	41,149,466	14,404,077	-	4,550,929,241
2018	4,737,604,779	36,802,183	13,668,587	-	4,788,075,549
2019	4,908,681,141	44,666,591	10,664,553	-	4,964,012,285
2020	5,137,911,088	56,720,875	17,513,367	(741,278)	5,211,404,052

Employee Pension Stability Accounts

Calendar Year	Benefits	Administrative Expenses	Refunds	Intraccount Transfers	Total
2020	$ -	$ 240	$ N/A	$ 741,278	$ 741,518

Oregon Public Service Retirement Plan
Individual Account Program

Calendar Year	Benefits	Administrative Expenses	Refunds	Intraccount Transfers	Total
2011	$ 196,350,366	$ 8,363,154	$ N/A	$ N/A	$ 204,713,520
2012	218,180,975	5,528,973	N/A	N/A	223,709,948
2013	301,297,929	7,164,598	N/A	N/A	308,462,527
2014	332,722,945	7,315,352	N/A	N/A	340,038,297
2015	343,688,428	7,746,075	N/A	N/A	351,434,503
2016	386,689,618	9,106,820	N/A	N/A	395,796,438
2017	497,309,999	9,958,373	N/A	N/A	507,268,372
2018	508,929,082	13,454,299	N/A	N/A	522,383,381
2019	545,539,814	12,321,208	N/A	N/A	557,861,022
2020	655,602,622	12,255,726	N/A	N/A	667,858,348

Deferred Compensation Plan

Calendar Year	Benefits	Administrative Expenses	Refunds	Intraccount Transfers	Total
2011	$ 60,816,774	$ 963,874	$ N/A	$ N/A	$ 61,780,648
2012	65,498,582	783,755	N/A	N/A	66,282,337
2013	79,075,903	982,625	N/A	N/A	80,058,528
2014	92,995,075	998,023	N/A	N/A	93,993,098
2015	82,398,740	1,050,769	N/A	N/A	83,449,509
2016	81,073,521	1,374,662	N/A	N/A	82,448,183
2017	101,419,280	1,390,830	N/A	N/A	102,810,110
2018	131,272,865	1,483,023	N/A	N/A	132,755,888
2019	120,101,006	2,705,025	N/A	N/A	122,806,031
2020	129,947,918	2,007,705	N/A	N/A	131,955,623

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

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

Defined Benefit Pension Plan

Calendar Year	Additions	Deductions[2]	Net Change	Net Position[3] Beginning of Year	Net Position[3] End of Year
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	55,821,546,984	62,163,418,323
2014	5,293,707,597	3,941,204,103	1,352,503,494	62,163,400,642	63,515,904,136
2015	2,374,654,568	4,116,424,013	(1,741,769,445)	63,515,904,136	61,774,134,691
2016	5,279,761,286	4,305,852,140	973,909,146	61,774,134,691	62,748,043,837
2017	10,537,166,278	4,551,871,595	5,985,294,683	62,748,043,837	68,733,338,520
2018	1,982,691,030	4,788,075,549	(2,805,384,519)	68,733,338,520	65,927,954,001
2019	10,638,665,432	4,964,012,285	5,674,653,147	65,927,954,001	71,602,607,148
2020	7,173,684,348	5,211,404,052	1,962,280,296	71,602,607,148	73,564,887,444

Employee Pension Stability Account

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2020	$ 67,412,661	$ 741,518	$ 66,671,143	$ -	$ 66,671,143

Oregon Public Service Retirement Plan
Individual Account Program

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2011	$ 614,258,421	$ 204,713,520	$ 409,544,901	$ 3,555,854,807	$ 3,965,399,708
2012	1,122,991,607	223,709,948	899,281,659	3,965,399,708	4,864,681,367
2013	1,357,494,695	308,462,527	1,049,032,168	4,864,681,367	5,913,713,535
2014	961,135,579	340,038,297	621,097,282	5,913,713,535	6,534,810,817
2015	737,163,726	351,434,503	385,729,223	6,534,810,817	6,920,540,040
2016	1,115,360,766	395,796,438	719,564,328	6,920,540,040	7,640,104,368
2017	1,827,528,704	507,268,372	1,320,260,332	7,640,104,368	8,960,364,700
2018	577,218,311	522,383,381	54,834,930	8,960,364,700	9,015,199,630
2019	1,934,528,513	557,861,022	1,376,667,491	9,015,199,630	10,391,867,121
2020	1,500,913,954	667,858,348	833,055,606	10,391,867,121	11,224,922,727

Deferred Compensation Plan

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
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	296,211,535	80,058,528	216,153,007	1,186,091,966	1,402,244,973
2014	194,684,257	93,993,098	100,691,159	1,402,244,973	1,502,936,132
2015	112,460,653	83,449,509	29,011,144	1,502,936,132	1,531,947,276
2016	192,953,262	82,448,183	110,505,079	1,531,947,276	1,642,452,355
2017	332,814,431	102,810,110	230,004,321	1,642,452,355	1,872,456,676
2018	206,919,214	132,755,888	74,163,326	1,872,456,676	1,946,620,002
2019	361,964,186	122,806,031	239,158,155	1,946,620,002	2,185,778,157
2020	531,649,838	131,955,623	399,694,215	2,185,778,157	2,585,472,372

[1]Calendar year-end information is provided because earnings are distributed as of December 31.
[2]Balances are restated for calendar years 2011 to 2015 due to prior period adjustments.
[3]Balances restated for calendar years 2013, 2014, and 2017 to correct amounts.

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

Retirement Health Insurance Account

Calendar Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2011	$ N/A	$ 32,610,644	0.25 %	$ 5,474,204	$ 38,084,848
2012	N/A	48,118,569	0.38	35,088,054	83,206,623
2013	N/A	47,729,940	0.59	46,420,994	94,150,934
2014	N/A	49,466,294	0.56	25,754,870	75,221,164
2015	N/A	48,846,297	0.55	7,995,269	56,841,566
2016	N/A	48,339,520	0.59	31,003,380	79,342,900
2017	N/A	49,167,576	0.50	72,787,020	121,954,596
2018	N/A	49,483,717	0.48	1,768,069	51,251,786
2019	N/A	30,090,293	0.27	76,707,399	106,797,692
2020	N/A	3,000,272	0.03	46,001,641	49,001,913

Retiree Health Insurance Premium Account

Calendar Year	Member Contributions	Employer Contributions: Dollars	Employer Contributions: Percent of Annual Covered Payroll	Net Investment and Other Income	Total
2011	$ N/A	$ 2,347,710	0.06 %	$ 158,742	$ 2,506,452
2012	N/A	3,450,509	0.10	557,438	4,007,947
2013	N/A	4,708,305	0.15	588,465	5,296,770
2014	N/A	6,378,015	0.19	361,915	6,739,930
2015	N/A	8,747,711	0.24	131,852	8,879,563
2016	N/A	11,621,895	0.25	933,866	12,555,761
2017	N/A	12,646,688	0.40	2,915,300	15,561,988
2018	N/A	13,587,039	0.45	(36,367)	13,550,672
2019	N/A	12,766,276	0.37	5,311,670	18,077,946
2020	N/A	11,367,169	0.31	4,470,919	15,838,088

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

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

Retirement Health Insurance Account

Calendar Year	Benefits	Administrative Expenses	Refunds	Total
2011	$ 29,524,122	$ 1,283,144	$ N/A	$ 30,807,266
2012	30,375,640	837,282	N/A	31,212,922
2013	31,132,920	1,095,853	N/A	32,228,773
2014	31,636,379	1,167,459	N/A	32,803,838
2015	32,273,928	1,223,215	N/A	33,497,143
2016	32,385,680	1,206,654	N/A	33,592,334
2017	32,438,822	1,275,297	N/A	33,714,119
2018	32,422,620	1,374,059	N/A	33,796,679
2019	32,074,620	1,311,208	N/A	33,385,828
2020	31,655,700	1,277,801	N/A	32,933,501

Retiree Health Insurance Premium Account

Calendar Year	Benefits	Administrative Expenses	Refunds	Total
2011	$ 3,547,400	$ 124,769	$ N/A	$ 3,672,169
2012	3,968,267	134,246	N/A	4,102,513
2013	4,323,159	172,485	N/A	4,495,644
2014	4,615,612	180,524	N/A	4,796,136
2015	4,680,196	214,500	N/A	4,894,696
2016	4,340,503	288,507	N/A	4,629,010
2017	4,578,655	273,005	N/A	4,851,660
2018	4,608,776	290,534	N/A	4,899,310
2019	4,365,646	297,957	N/A	4,663,603
2020	3,867,431	280,878	N/A	4,148,309

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

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

Retirement Health Insurance Account

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2011	$ 38,084,848	$ 30,807,266	$ 7,277,582	$ 232,332,932	$ 239,610,514
2012	83,206,623	31,212,922	51,993,701	239,610,514	291,604,215
2013	94,150,934	32,228,773	61,922,161	291,604,215	353,526,376
2014	75,221,164	32,803,838	42,417,326	353,526,376	395,943,702
2015	56,841,566	33,497,143	23,344,423	395,943,702	419,288,125
2016	79,342,900	33,592,334	45,750,566	419,288,125	465,038,691
2017	121,954,596	33,714,119	88,240,477	465,038,691	553,279,168
2018	51,251,786	33,796,679	17,455,107	553,279,168	570,734,275
2019	106,797,692	33,385,828	73,411,864	570,734,275	644,146,139
2020	49,001,913	32,933,501	16,068,412	644,146,139	660,214,551

Retiree Health Insurance Premium Account

Calendar Year	Additions	Deductions	Net Change	Net Position Beginning of Year	Net Position End of Year
2011	$ 2,506,452	$ 3,672,169	$ (1,165,717)	$ 5,705,118	$ 4,539,401
2012	4,007,946	4,102,513	(94,567)	4,539,401	4,444,834
2013	5,296,770	4,495,644	801,126	4,444,834	5,245,960
2014	6,739,930	4,796,136	1,943,794	5,245,960	7,189,754
2015	8,879,563	4,894,696	3,984,867	7,189,754	11,174,621
2016	12,555,761	4,629,010	7,926,751	11,174,621	19,101,372
2017	15,561,988	4,851,660	10,710,328	19,101,372	29,811,700
2018	13,550,672	4,899,310	8,651,362	29,811,700	38,463,062
2019	18,077,946	4,663,603	13,414,343	38,463,062	51,877,405
2020	15,838,088	4,148,309	11,689,779	51,877,405	63,567,184

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

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

Calendar Year	Tier One Earnings Available for Crediting	Credited: Tier One	Credited: Tier Two	Variable Earnings/ (Loss) Credited	Individual Account Program
2011	2.21 %	8.00 %	2.21 %	(7.80) %	2.15 %
2012	14.53	8.00	14.68	18.43	14.09
2013	15.76	8.00	15.62 [2]	25.74 [3]	15.59
2014	7.24	7.75	7.24	4.29	7.05
2015	1.87	7.75	1.87	(1.61)	1.85
2016	7.15	7.50	7.15	8.76	7.13
2017	15.23	7.50	15.23	26.48	14.72
2018	0.23	7.20	0.23	(10.03)	(0.63)
2019	13.27	7.20	13.27	28.80	13.35
2020	7.18	7.20	7.18	11.77	8.37

[1]Calendar year-end information is provided because earnings are credited as of December 31.
[2]Earnings rate includes allocation from settlement of *Murray v. PERB* litigation.
[3]Earnings rate includes allocation from settlement of *White, et al. v. PERB* litigation.

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

Fiscal Year	Service Benefits	Disability Benefits: Duty	Disability Benefits: Non-Duty	Retirement Benefit Totals	Death Benefits	Refunds: Normal	Refunds: Death	Total
2012	$ 3,166,918,154	$16,449,589	$108,423,907	$ 3,291,791,650	$ 3,918,168	$ 27,966,120	$ 6,054,330	$ 3,329,730,268
2013	3,422,618,167	17,242,718	111,616,337	3,551,477,222	4,582,777	10,074,038	7,365,530	3,573,499,567
2014	3,701,010,685	17,739,646	113,317,283	3,832,067,614	5,802,797	13,614,833	11,945,261	3,863,430,505
2015	3,790,050,384	17,943,338	113,129,130	3,921,122,852	6,044,180	7,283,720	9,197,495	3,943,648,247
2016	4,045,951,252	18,896,881	118,534,433	4,183,382,566	9,925,146	6,342,385	6,812,193	4,206,462,290
2017	4,204,153,060	18,965,495	118,479,583	4,341,598,137	4,684,598	6,589,962	9,371,782	4,362,244,479
2018	4,497,671,956	19,356,946	120,819,135	4,637,868,037	4,849,807	5,145,792	8,730,502	4,656,594,138
2019	4,666,793,109	20,360,781	123,821,174	4,810,975,064	4,083,536	3,356,265	8,547,377	4,826,962,242
2020	4,894,294,688	21,041,469	124,420,605	5,039,756,762	6,174,392	8,105,287	10,750,010	5,064,786,451
2021	5,084,114,373	21,560,657	126,540,003	5,232,215,034	4,922,561	4,721,963	7,212,502	5,249,072,060

Schedule of Average OPEB Benefits for Retirement Health Insurance Account[1] For the Fiscal Year Ended June 30, 2021:

Years Credited Service	8+
Average Monthly Benefit	$60.00
Final Average Salary	N/A
Number of Active Retirees	42,857

Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account[1] For the Fiscal Year Ended June 30, 2021:

	Years Credited Service: 8 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	Total
Average Monthly Benefit	$ 223	$ 267	$ 311	$ 356	$ 400	$ 445	$ 415
Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of Active Retirees	6	11	31	71	151	415	690

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

Schedule of Average Defined Benefit Pension Payments

Retirement Effective Dates July 1, 2011 to June 30, 2021		Years Credited Service 0-5	6-10	11-15	16-20	21-25	26-30	31+	Total
2012	Average Monthly Benefit	$703	$1,079	$1,541	$1,988	$2,743	$4,117	$5,668	**$2,766**
	Final Average Salary	$3,575	$3,901	$4,394	$4,923	$5,715	$6,289	$6,983	**$5,323**
	Number of Active Retirees	315	844	985	1,039	1,217	1,190	864	**6,454**
2013	Average Monthly Benefit	$754	$1,139	$1,582	$2,066	$2,771	$4,080	$5,788	**$2,770**
	Final Average Salary	$3,672	$3,836	$4,453	$5,028	$5,934	$6,656	$6,958	**$5,414**
	Number of Active Retirees	377	930	1,075	1,092	1,330	1,146	935	**6,885**
2014	Average Monthly Benefit	$803	$1,135	$1,495	$1,908	$2,653	$3,828	$5,622	**$2,617**
	Final Average Salary	$3,581	$3,647	$4,356	$5,007	$5,886	$6,393	$6,941	**$5,298**
	Number of Active Retirees	389	1,018	1,106	1,207	1,428	1,225	923	**7,296**
2015	Average Monthly Benefit	$651	$886	$1,325	$1,848	$2,482	$3,656	$5,473	**$2,402**
	Final Average Salary	$3,932	$3,823	$4,505	$5,164	$5,772	$6,542	$7,352	**$5,408**
	Number of Active Retirees	294	822	992	1,097	1,144	1,098	642	**6,089**
2016	Average Monthly Benefit	$748	$927	$1,320	$1,865	$2,468	$3,628	$5,446	**$2,497**
	Final Average Salary	$3,604	$3,808	$4,524	$5,205	$5,883	$6,822	$7,346	**$5,540**
	Number of Active Retirees	329	851	989	1,119	1,239	1,291	800	**6,618**
2017	Average Monthly Benefit	$718	$1,042	$1,370	$1,838	$2,600	$3,605	$5,532	**$2,608**
	Final Average Salary	$3,659	$3,858	$4,541	$5,434	$6,206	$7,039	$8,105	**$5,830**
	Number of Active Retirees	372	897	1,084	1,191	1,173	1,371	1,030	**7,118**
2018	Average Monthly Benefit	$802	$1,052	$1,330	$1,789	$2,588	$3,498	$5,206	**$2,504**
	Final Average Salary	$3,937	$3,983	$4,379	$5,426	$6,384	$7,082	$8,035	**$5,854**
	Number of Active Retirees	352	940	1,051	1,342	1,223	1,495	952	**7,355**
2019	Average Monthly Benefit	$837	$971	$1,267	$1,839	$2,634	$3,563	$5,062	**$2,381**
	Final Average Salary	$4,014	$3,948	$4,554	$5,574	$6,534	$7,411	$8,353	**$5,893**
	Number of Active Retirees	410	966	1,005	1,208	1,107	1,272	740	**6,708**
2020	Average Monthly Benefit	$795	$957	$1,194	$1,749	$2,685	$3,736	$4,958	**$2,442**
	Final Average Salary	$3,940	$4,166	$4,563	$5,471	$6,852	$7,921	$8,539	**$6,148**
	Number of Active Retirees	400	889	1,094	1,141	1,256	1,226	892	**6,898**
2021	Average Monthly Benefit	$693	$992	$1,223	$1,785	$2,642	$3,748	$4,845	**$2,435**
	Final Average Salary	$4,022	$4,137	$4,644	$5,719	$6,753	$8,040	$8,210	**$6,171**
	Number of Active Retirees	396	830	899	1,111	1,229	1,145	804	**6,414**

Schedule of Benefit Recipients by Benefit Type
For the Fiscal Year Ended June 30, 2021

Monthly Benefit Amount	Number of Retirees	Type of Retirement *					Refund Annuity	Annuity Options **				Lump-Sum Options **		
		1	2	3	4	5		1	2	3	4	1	2	3
$ 1-500	17,221	13,940	45	79	2,678	479	1,031	5,917	5,225	971	755	1,628	1,369	325
501-1000	21,730	18,032	81	447	2,421	749	1,942	7,647	7,165	1,812	1,194	923	829	218
1001-1500	18,243	15,160	81	554	1,824	624	1,604	6,035	6,452	1,718	865	693	671	205
1501-2000	15,792	13,209	59	527	1,490	507	1,369	4,767	5,882	1,647	761	546	670	150
2001-2500	13,974	11,924	61	481	1,126	382	1,226	4,091	5,232	1,506	598	523	660	138
2501-3000	11,992	10,420	60	378	878	256	1,036	3,330	4,682	1,260	489	459	621	115
3001-3500	10,137	8,945	48	277	679	188	831	2,747	4,084	1,230	381	340	428	96
3501-4000	8,772	7,903	52	172	538	107	727	2,375	3,618	1,144	341	191	311	65
4001-4500	7,716	7,028	42	140	447	59	602	2,067	3,428	1,024	277	125	148	45
4501-5000	6,616	6,149	27	78	327	35	473	1,717	2,971	962	267	86	103	37
5001-5500	5,842	5,467	17	46	288	24	400	1,488	2,763	856	204	37	71	23
5501-6000	4,771	4,445	11	41	256	18	338	1,190	2,235	751	160	28	56	13
6000+	13,694	12,849	31	60	714	40	746	3,033	6,628	2,691	416	58	98	24
Totals	**156,500**	**135,471**	**615**	**3,280**	**13,666**	**3,468**	**12,325**	**46,404**	**60,365**	**17,572**	**6,708**	**5,637**	**6,035**	**1,454**

* Type of Retirement

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

** Annuity and Lump-Sum Options

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

Schedule of Retirement System Membership
at December 31:

	Five Year Increments							
Five Year Increments	1985	1990	1995	2000	2005	2010	2015	2020
State Agencies	37,824	46,187	45,068	42,434	38,076	48,018	47,331	50,261
School Districts	47,590	48,144	55,734	63,133	56,756	79,798	66,184	72,508
Political Subdivisions	26,238	33,177	40,635	53,291	50,085	65,332	54,662	57,889
Inactive Members	15,920	23,225	32,033	44,830	47,289	40,481	42,849	47,565
Total Non-Retired	127,572	150,733	173,470	203,688	192,206	233,629	211,026	228,223
Retired Members and Beneficiaries	46,181	55,540	64,796	82,355	101,213	110,573	136,298	156,277
Total Membership	173,753	206,273	238,266	286,043	293,419	344,202	347,324	384,500
Administrative Expense[1]	$2,905,072	$8,901,091	$13,500,677	$24,358,550	$40,056,600	$38,029,071	$47,934,435	$72,956,312
Pension Roll (one month)	$18,083,614	$33,175,888	$58,457,531	$122,467,087	$202,633,214	$265,490,496	$333,044,107	$408,717,504

[1] Fiduciary Funds only.

Schedule of Retirement System Membership
at June 30:

	2013	2014	2015	2016	2017	2018	2019	2020	2021
State Agencies	45,019	45,774	47,620	47,868	48,099	48,320	49,699	49,506	51,340
School Districts	63,297	64,824	66,434	68,648	69,510	71,238	73,164	72,258	71,894
Political Subdivisions[2]	54,943	54,376	54,536	55,160	55,696	56,439	53,464	56,913	56,864
Inactive Members	44,819	43,646	44,786	45,925	45,709	45,993	48,786	46,530	48,384
Total Non-Retired	208,078	208,620	213,376	217,601	219,014	221,990	225,113	225,207	228,482
Retired Members and Beneficiaries	123,827	129,138	132,506	136,435	136,435	145,863	149,386	153,622	156,500
Total Membership	331,905	337,758	345,882	354,036	355,449	367,853	374,499	378,829	384,982
Administrative Expense[1]	$42,792,995	$40,395,370	$45,791,942	$51,763,886	$55,931,659	$53,090,243	$54,880,713	$63,911,998	$75,910,699
Pension Roll (one month)	$299,997,147	$303,834,899	$317,090,746	$337,405,252	$355,414,652	$376,397,537	$382,187,402	$399,447,944	$416,186,453

[1] Fiduciary Funds only.
[2] Includes Community Colleges

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

	2021			2012		
	Number of Current Employees	Rank	Percent of Total System	Number of Current Employees	Rank	Percent of Total System
State of Oregon	51,340	1	28.51 %	45,953	1	27.07 %
Portland Public Schools	6,147	2	3.41	5,128	3	3.02
Portland, City of	5,226	3	2.90	4,490	5	2.64
Salem-Keizer Public Schools	5,122	4	2.84	4,782	4	2.82
Multnomah County	4,990	5	2.77	4,468	6	2.63
Beaverton School District	4,441	6	2.47	4,349	7	2.56
Oregon Health & Science University	3,642	7	2.02	5,744	2	3.38
Hillsboro School District #1J	2,387	8	1.33	2,501	8	1.47
Portland Community College	2,206	9	1.22	2,449	9	1.44
Clackamas County	2,123	10	1.18	1,909	10	1.12
All Others*	92,474		51.35	88,008		51.85
Total	180,098		100.00 %	169,781		100.00 %

* "All Others" consisted of:

Counties	11,953		6.64 %	11,140		6.56 %
Municipalities	13,534		7.52	12,464		7.35
School Districts	53,797		29.88	50,412		29.69
Community Colleges	5,194		2.88	6,060		3.57
Other Political Subdivisions	7,996		4.44	7,932		4.67
Total All Others	92,474		51.35 %	88,008		51.85 %

Schedule of Participating Employers (900)

State (108)
Appraiser Certification and Licensure Board
Board of Accountancy
Board of Architect Examiners
Board of Chiropractic Examiners
Board of Examiners for Engineering and Land Surveying
Board of Geologist Examiners
Board of Optometry
Board of Parole and Post-Prison Supervision
Board of Pharmacy
Bureau of Labor and Industries
Commission on Indian Services
Commission on Judicial Fitness and Disability
Construction Contractors Board
Department of Administrative Services
Department of Agriculture
Department of Aviation
Department of Consumer and Business Services
Department of Corrections
Department of Education
Department of Energy
Department of Environmental Quality
Department of Human Services
Department of Justice
Department of Land Conservation and Development
Department of Military-Federal Employees
Department of Revenue
Department of State Lands
Department of State Police
Department of Transportation
Department of Veterans' Affairs
Higher Education Coordinating Commission
District Attorneys Department
Eastern Oregon University
Employment Department
Employment Relations Board
Forestry Department
Geology and Mineral Industries
Health Related Licensing Boards
JudgesPERS
Judicial Department
Land Use Board of Appeals
Landscape Contractors Board
Legislative Administration Board (Committee)
Legislative Assembly
Legislative Committees
Legislative Fiscal Office
Legislative Policy & Research Committee
Long Term Care Ombudsman
Mental Health Regulatory Agency
Military Department
Office of Legislative Counsel
Office of the Governor
Office of the State Treasurer
Oregon Advocacy Commissions Office
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 Hop Commission
Oregon Housing and Community Services
Oregon Institute of Technology
Oregon Liquor Control Commission
Oregon Parks and Recreation Department
Oregon Patient Safety Commission
Oregon Potato Commission
Oregon Racing Commission
Oregon Salmon Commission
Oregon State Bar
Oregon State Bar Professional Liability Fund
Oregon State Board of Nursing
Oregon State Library
Oregon State University
Oregon Tourism Commission
Oregon Trawl Commission
Oregon Watershed Enhancement Board
Oregon Wheat Commission
Oregon Youth Authority
Physical Therapist Licensing Board
Portland State University
Psychiatric Security Review Board
Public Defense Services Commission
Public Employees Retirement System
Public Safety Standards and Training
Public Utility Commission
Real Estate Agency
Secretary of State
Southern Oregon University
State Accident Insurance Fund
State Board of Clinical Social Workers
State Board of Tax Practitioners
State Lottery Commission
State Marine Board
Teacher Standards and Practices Commission
Travel Information Council
University of Oregon
Water Resources Department
Western Oregon University

Political Subdivisions (480)
Adair Village, City of
Albany, City of
Amity Fire District
Amity, City of
Applegate Valley RFPD 9
Arch Cape Water/Sanitary District
Ashland Parks Commission
Ashland, City of
Astoria, City of
Athena, City of
Aumsville RFPD
Aumsville, City of
Aurora RFPD
Aurora, City of
Baker County
Baker County Library District
Baker Valley Irrigation District
Baker City, City of
Bandon, City of
Banks Fire District 13
Banks, City of
Bay City, City of
Beaverton, City of
Bend Metropolitan Park and Recreation District
Bend, City of
Benton County
Black Butte Ranch RFPD
Black Butte Ranch Service District
Boardman RFPD
Boardman, City of
Brookings, City of
Brownsville RFPD
Burns, City of
Burnt River Irrigation District
Butte Falls, Town of
Canby FPD 62
Canby Utility Board
Canby, City of
Cannon Beach RFPD
Cannon Beach, City of
Canyon City, Town of
Canyonville, City of
CareOregon
Carlton, City of
Cascade Locks, City of
Cave Junction, City of
Central Cascades Fire and EMS
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
Clackamas River Water Providers
Clatskanie Library District
Clatskanie People's Utility District
Clatskanie RFPD
Clatskanie, City of
Clatsop County
Clean Water Services
Cloverdale RFPD
Coburg RFPD
Coburg, City of
Colton RFPD 70
Columbia City, City of
Columbia County
Columbia County 911 Communications District
Columbia Drainage Vector Control District
Columbia River Fire and Rescue
Columbia River PUD
Community Services Consortium
Condon, City of
Coos Bay, City of
Coos County
Coos County Airport District
Coquille, City of
Corbett Water District
Cornelius, City of
Corvallis, City of
Cottage Grove, City of
Crescent RFPD
Creswell, City of
Crook County
Crook County RFPD 1
Crooked River Ranch RFPD
Crystal Springs Water District
Culver, City of
Curry County
Curry Public Library District
Dallas, City of
Dayton, City of
Depoe Bay RFPD
Depoe Bay, City of
Deschutes County
Deschutes Public Library District
Deschutes Valley Water District
Dexter RFPD
Douglas County
Douglas County RFPD 2
Douglas County Soil and Water Conservation District
Drain, City of
Dufur, City of
Dundee, City of
Dunes City, City of
Durham, City of
Eagle Point, City of
East Fork Irrigation District
East Umatilla County RFPD
Echo, City of
Elgin, City of
Elkton, City of
Enterprise, City of
Estacada Cemetery Maintenance District
Estacada RFD 69
Estacada, City of
Eugene Water and Electric Board
Eugene, City of
Fairview Water District
Fairview, City of
Falls City, City of
Farmers Irrigation District
Fern Ridge Community Library
Florence, City of
Forest Grove, City of
Fossil, City of
Garibaldi, City of
Gaston RFPD
Gaston, City of
Gearhart, City of
Gervais, City of
Gilliam County
Gladstone, City of
Glide RFPD
Gold Beach, City of
Gold Hill, City of
Goshen RFPD
Grant County
Grant County Emergency Communications
Grants Pass Irrigation District
Grants Pass, City of
Greater St. Helens Aquatic District
Greater Toledo Pool Recreation District
Green Sanitary District
Gresham, City of
Halsey, City of
Halsey-Shedd RFPD
Happy Valley, City of
Harbor Water PUD
Harney County
Harney Health District
Harrisburg Fire and Rescue
Harrisburg, City of
Helix, City of
Heppner, City of
Hermiston, City of
High Desert Park and Recreation District
Hillsboro, City of
Hines, City of
Hood River County
Hood River, City of
Hoodland RFD 74
Horsefly Irrigation District
Housing Authority of Clackamas County
Housing Authority of Jackson County
Home Forward
Hubbard RFPD
Hubbard, City of
Huntington, City of
Ice Fountain Water District
Idanha-Detroit Rural Fire Protection District
Illinois Valley RFPD
Imbler RFPD
Imbler, City of
Independence, City of
Irrigon, City of
Jackson County
Jackson County Fire District 3
Jackson County Fire District 4
Jackson County Fire District 5
Jackson County Fire District 6
Jackson County Vector Control District
Jacksonville, City of
Jefferson County
Jefferson County EMS District
Jefferson County Library District
Jefferson County RFPD 1
Jefferson County SWCD
Jefferson RFPD
Jefferson, City of
John Day, City of
Jordan Valley, City of
Joseph, City of
Josephine County
Juntura Road District
Junction City RFPD
Junction City, City of
Keizer RFPD
Keizer, City of
Keno Rural Fire Protection District
King City, City of
Klamath County
Klamath County Emergency Communications
Klamath County Fire District 1
Klamath Falls, City of
Klamath Housing Authority
Klamath Vector Control District
Knappa Svensen Burnside RFPD
La Grande Rural Fire Protection District
La Grande, City of
La Pine RFPD
Lafayette, City of
Lake Chinook Fire And Rescue District
Lake County
Lake County Library District
Lake Health District
Lake Oswego, City of
Lakeside Water District
Lakeside, City of
Lakeview, Town of
Lane Council of Governments
Lane County
Lane Fire Authority
League of Oregon Cities
Lebanon Aquatic District
Lebanon RFPD
Lebanon, City of
Lincoln City, City of
Lincoln County
Linn County

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

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

Community Colleges (17)

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

School Districts (295)

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

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

Umatilla CSD 61R
Umatilla CSD 6R
Umatilla CSD 7
Umatilla CSD 80R
Umatilla CSD 8R
Union CSD 1
Union CSD 11
Union CSD 15
Union CSD 23
Union CSD 5
Valley Inquiry Charter School
Wahtonka Community School
Wallowa County Region 18 ESD
Wallowa CSD 12
Wallowa CSD 21
Wallowa CSD 54
Wallowa CSD 6
Wasco CSD 29
Washington CSD 13
Washington CSD 15
Washington CSD 23J
Washington CSD 511JT
Washington CSD 88J
West Lane Technical Learning Center
Wheeler CSD 55U
Wheeler CSD 1
Willamette Connections Academy
Willamette ESD
Woodland Charter School
Yamhill CSD 1
Yamhill CSD 29JT
Yamhill CSD 30-44-63J
Yamhill CSD 40
Yamhill CSD 48J

Participation of Employers in Defined Benefit and Other Postemployment Benefit Plans

Defined Benefit Pension Plan - all 900 Employers participate
RHIA OPEB Plan - all 900 Employers participate
RHIPA OPEB Plan - all 108 State Agency employers participate (see page 175)

OREGON

PERS

75 years of serving
those who serve Oregon