

# Annual Comprehensive Financial Report

For the fiscal year ended June 30, 2023



Oregon Public Employees Retirement System  
A component unit of the State of Oregon







# Annual Comprehensive **Financial Report**

For the fiscal year ended June 30, 2023

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A component unit of the State of Oregon

Kevin Olineck | Director

Richard Horsford | Chief Financial Officer



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# Introductory Section







# Oregon

Tina Kotek, Governor

## Public Employees Retirement System

Headquarters

11410 S.W. 68<sup>th</sup> Parkway, Tigard, OR

Mailing Address:

P.O. Box 23700

Tigard, OR 97281-3700

888-320-7377

TTY (503) 603-7766

[www.oregon.gov/pers](http://www.oregon.gov/pers)

December 1, 2023

To the Members of the Oregon Public Employees Retirement System Public Employees Retirement Board:

We are pleased to present the Annual Comprehensive Financial Report (ACFR) of the Oregon Public Employees Retirement System (PERS, System or Agency) for the fiscal year ended June 30, 2023. 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, 2023, PERS provides services to 897 employers and more than 405,000 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 titled 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 27.

## **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 the information presented in this report. To provide a reasonable basis for making these representations, management of the System has (1) established internal controls designed to protect the System's assets from loss, theft, or misuse, and (2) compiled 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 in Table 9 of the Management's Discussion and Analysis section of this report.

### **FUNDING**

The System is funded through contributions and investment earnings. For judges, the contribution is set at 7.0% 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, 2022, actuarial valuation, the System has a funded ratio of 79% for the defined benefit pension plan it administers, including employer side accounts, and a 73% funded ratio excluding employer side accounts. Public pension funds' average funding ratio was 77.8% in 2022, with the majority of pensions' revenue (68%) coming from investment returns, according to an annual study by the National Conference on Public Employee Retirement Systems (NCPERS).

All members, apart from judges, contribute 6.0% 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 members' contributions to their IAP accounts to be redirected to their new Employee Pension Stability Account (EPSA) to help fund the cost of their future pension benefits. For Oregon Public Service Retirement Plan (OPSRP) members, the redirected amount is 0.75% of their IAP contribution, and for Tier One and Tier Two members, the redirected amount is 2.5% of their IAP contribution. In 2023, only members who earned more than \$3,570 a month were subject to a portion of their IAP contributions being redirected to the EPSA.

## 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 the 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, 2023, was 27.5% public equity, 20.0% private equity, 25.0% debt securities, 12.5% real estate, 7.5% real assets, and 7.5% diversifying strategies. 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 Corporation.

The System's Regular Investment Portfolio (Portfolio) experienced a rate of return of 3.2% in fiscal year 2023. This compares with a rate of return of 6.3% for fiscal year 2022. The Portfolio's trailing 10-year return was 8.3%. Descriptions of OIC policies regarding diversification, performance objectives, fees, and asset allocation are found on page 123.

## 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 continue to provide our members and employers with uninterrupted service while working through the intricacies of implementation.

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
Technical Debt	7/1/2021

As of June 30, 2023, PERS fully finished and closed the Employer Programs, Salary Limit, Member Choice, and Work After Retirement projects. The Technical Debt and Member Redirect projects have an expected completion date of June 2025. PERS received funding for these projects for the 2023-25 biennium.

## STRATEGIC MANAGEMENT SYSTEM

PERS continues to evolve its outcome-based management system (POBMS) 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 2023–2028 PERS Strategic Plan was approved by the PERS Board 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 Consistency.
4. Information Technology.
5. Financial Management.
6. Risk Management.

For each of the strategic priorities, PERS is using existing strategic and operational planning functions to prioritize and allocate resources. We are using a variety of methods to implement each priority, including problem solving, project management, breakthrough initiatives, and integration into core business practices. We have identified specific performance metrics to track our progress.

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

More information on the 2023–2028 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 established a continuity management program, which encompasses our Continuity of Operations, Business Recovery, and Disaster Recovery plans. We will continue to flesh out the plans and build a more robust continuity management program.

Like continuity management, information security is one of the foundational initiatives the Agency has in place. This ensures that the data and personal information we maintain are secure. Working collaboratively with the State Enterprise Security Office, the staff made significant strides in enhancing our information security program in fiscal year 2023.

## **MEMBER AND EMPLOYER SATISFACTION SURVEYS**

PERS' 2023 Member Satisfaction Survey results show a nearly 4% increase in member satisfaction from 2022, continuing last year's trend of increasing member satisfaction. Overall quality of service was rated at 88.8% in 2023, up from 85.1%. This year, a concerted communications campaign was launched to increase email subscriptions, which has produced a marked increase in surveys completed.

Employers reported a satisfaction rating of 86.9% in 2023, up from 86.0% in 2022.

## **Awards and Acknowledgments**

### **CERTIFICATE OF ACHIEVEMENT**

Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PERS for its annual comprehensive financial report for the fiscal year ended June 30, 2022. This was the 32<sup>nd</sup> consecutive year that the government has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to GFOA to determine its eligibility for another certificate.

## **PUBLIC PENSION STANDARDS AWARD**

The Public Pension Coordinating Council (PPCC) awarded the 2023 Public Pension Standards Award to PERS for its plan funding and administration.

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

This is the 21<sup>st</sup> year the PPCC has offered the award to public retirement systems and the 20<sup>th</sup> consecutive year PERS has applied for and received the award.

## **ACKNOWLEDGMENTS**

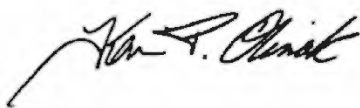
The information contained in this report is used to make management decisions, demonstrate stewardship of the assets entrusted to the System, and comply with legal and accounting provisions. The staff strives to provide reliable and complete information for these purposes. The compilation of this report 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>

A link to this document is emailed 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 (Board) to administer the PERS System. The board is composed of five trustees who administer retirement (both service retirement and disability retirement), death, and retiree health insurance benefits. PERS also administers the Oregon Savings Growth Plan (OSGP), a deferred compensation program for state and local government employees.

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

Statute specifies that PERS 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, 2023, the three PERS Board members representing business management, pension management, or investing are Sadhana Shenoy (board chair), Stephen Buckley (vice-chair), and Jardon Jaramillo. John Scanlan was appointed to represent public employees and retirees. Suzanne Linneen was appointed to represent public employers. Terms for each member are staggered.

### **SADHANA SHENOY (BOARD CHAIR)**

Sadhana Shenoy has spent more than 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 she 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 Young Entrepreneurs). She enjoys angel investing in exciting new ideas and promoting youth entrepreneurship.

Ms. Shenoy holds bachelor's degrees in accounting and business administration and a master's degree in computer science. She is a Certified Public Accountant (CPA) in Oregon.

### **STEPHEN BUCKLEY (VICE-CHAIR)**

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's 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**

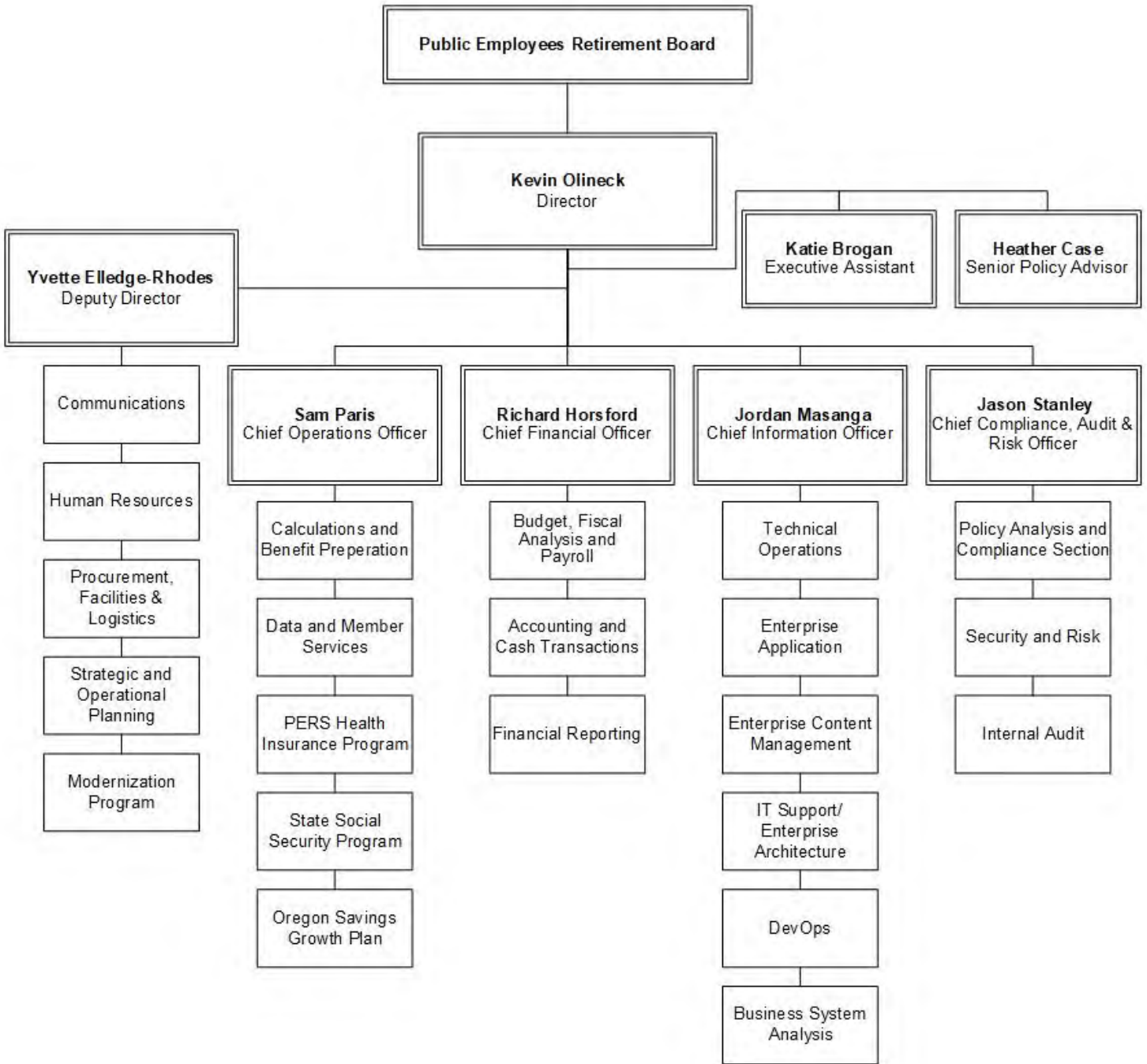
Jardon Jaramillo serves as Senior Director of Investor Relations, Treasury, and Risk Management at Portland General Electric, communicating and managing financial results. He previously worked as the Director of Compensation and Benefits from 2013 to 2016. As director, he was responsible for managing 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, and a bachelor's degree in economics from Northwest Nazarene University. He is a CPA licensed in Oregon.

### **SUZANNE LINNEEN**

Suzanne Linneen has served as the City of Hillsboro's finance director since 2009. She started working for the city in finance in 1995 and participated in a lot of change and growth in the city during that time. Originally from the Los Angeles area, Ms. Linneen attended the University of California, Santa Barbara; earned a bachelor's degree in business economics; and worked as an auditor for Deloitte & Touche in Century City, California, before moving to Oregon. She is a CPA and brings vast experience in accounting, budgeting, financial planning, and management to her role with the PERS Board.

# ORGANIZATIONAL CHART



## 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

The Oregon State Treasury is the investment officer for the State of Oregon. Investment brokers are reported in the Schedule of Fees and Commissions on page 127.





Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**Oregon Public Employees Retirement System**

For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

June 30, 2022

*Christopher P. Morrill*

Executive Director/CEO

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

- Financial Reporting Manager – Matthew Graves
- Financial Reporting Coordinator – Pat Donegan
- Senior Investment Accountant – Michiru Farney



Public Pension Coordinating Council

***Public Pension Standards Award  
For Funding and Administration  
2023***

Presented to

***Oregon Public Employees Retirement System***

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

*Presented by the Public Pension Coordinating Council, a confederation of*

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

A handwritten signature in cursive script that reads "Alan H. Winkle".

Alan H. Winkle  
Program Administrator



## **MISSION**

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



## **CORE VALUES**

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

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

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



## **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.

**Vigilant:** We are constantly vigilant and take ownership in the basic tenets of information security: confidentiality, integrity, and availability.





## **Financial Section**



## Independent Auditor's Report

To the Honorable Tina Kotek  
Governor of Oregon

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

### Report on the Audit of the Financial Statements

#### *Opinions*

We have audited the financial statements of the fiduciary activities and proprietary activities of the Oregon Public Employees Retirement System (the System), a component unit of the State of Oregon, as of and for the fiscal year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements 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, 2023, 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.

#### *Basis for Opinions*

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

#### *Other Matter*

##### *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, 2022, from which such partial information was derived.

### ***Report on Partial Comparative Information***

We have previously audited the System's 2022 financial statements, and we expressed unmodified audit opinions on the financial statements in our report dated December 1, 2022. In our opinion, the partial comparative information presented herein as of and for the fiscal year ended June 30, 2022, is consistent, in all material respects, with the audited financial statements from which it was derived.

### ***Responsibilities of Management for the Financial Statements***

The System's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

### ***Auditor's Responsibilities for the Audit of the Financial Statements***

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.



We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control–related matters that we identified during the audit.

#### ***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 – defined benefit pension plan, 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 basic financial statements. Such information is the responsibility of management and, 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 GAAS, 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.

#### ***Supplementary 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 schedule of plan net position – defined benefit pension plan, the schedule of changes in plan net position – defined benefit pension plan, the schedule of administrative expenses – all funds, the schedule of payments to consultants and contractors, and the summary of investment fees, commissions, and expenses (supplementary information) are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such 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. The 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 GAAS. In our opinion, the supplementary information, is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

#### ***Other Information***

The System’s management is responsible for the other information included in the annual comprehensive financial report. The other information comprises the introductory, investment, actuarial, and statistical sections but does not include the basic financial statements and our auditor’s report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated December 1, 2023, 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, 2023

## 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, 2023. 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 post employment benefit (OPEB) plans, a deferred compensation plan, and a proprietary fund.

### OVERVIEW OF THE FINANCIAL STATEMENTS AND ACCOMPANYING INFORMATION

This section provides an introduction to, and overview of, the basic financial statements, which comprise the 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 restricted and unrestricted net position of the proprietary fund administered by PERS as of June 30, 2023. It also summarizes the combined changes in net position restricted for pension benefits, other employee benefits and OPEB, the changes in restricted and 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, 2023, 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 (OPSRP) 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, 2023, along with comparative total information as of and for the fiscal year ended June 30, 2022. 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, 2023, along with

comparative total information as of and for the fiscal year ended June 30, 2022. 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 – 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 – 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 – the System's accounts receivables and payables.
- Note 4 – 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 – capital assets used in plan operations.
- Note 6 – reserves.
- Note 7 – potential contingencies of PERS.
- Note 8 – the estimated claims liability of the SRHIA.
- Note 9 – the Employers' Net Pension Liability.
- Note 10 – Employers' Net OPEB Liability/(Asset).
- Note 11 – Effect of Future Pronouncements.

## REQUIRED SUPPLEMENTARY INFORMATION

In addition to the financial statements and Notes to the Basic Financial Statements, 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 96, presents a 10-year trend schedule of the pension plan's change in total pension liability, change in 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.
- The Schedule of Investment Returns – Defined Benefit Pension Plan, page 96, presents a 10-year trend schedule of the annual money-weighted return (internal rate of return) on pension plan investments, net of pension plan investment expenses.
- The Schedule of Defined Benefit Pension Plan Employer Contributions, on page 98, 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. It also indicates whether there is a contribution deficiency or excess. In addition, the schedule shows the amounts of contributions recognized by the pension plan in relation to the actuarially determined contributions as a percentage of covered payroll.
- The Schedule of Changes in Net OPEB Liability/(Asset) and Related Ratios for RHIA is on page 100 and for RHIPA is on page 101. The schedules present 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 begin with the fiscal year ended June 30, 2017, which was the first year these schedules were required.

- The Schedule of Investment Returns – OPEB Plans for RHIA on page 100 and RHIPA on page 101, 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 expenses. These required 10-year trend schedules begin with fiscal year ended June 30, 2017, which was the first year these schedules were required.
- The Schedule of OPEB Plan Employer Contributions for both RHIA and RHIPA, on pages 102–105, 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. They also show whether there is a contribution deficiency or excess. In addition, the schedules 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 106, shows earned revenues and expenses over the past ten years.

## SUPPLEMENTARY INFORMATION

In addition to the Required Supplementary Information, there are five 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 108 and 110, display the components of the defined benefit pension plan.
- The Schedule of Administrative Expenses and Schedule of Payments to Consultants and Contractors on pages 112 and 113 show the costs of managing the System.
- The Summary of Investment Fees, Commissions, and Expenses begins on page 114 and provides the detail of investment related expenses included in the Investment Expense line item reported in the Statement of Changes in Fiduciary Net Position.

## Fiduciary Funds

- PERS' assets exceeded its liabilities at the close of fiscal year 2023, with \$100,091.3 million restricted for pension, IAP, OPEB, and deferred compensation benefits.
- Fiduciary net position increased by \$556.4 million, or 0.6%, primarily because employer contributions and earnings slightly exceeded total benefits and administrative expenses paid.
- PERS' funding objective is to meet long-term benefit obligations. As of December 31, 2022, the date of the latest actuarial funding valuation, the funded ratio of the defined benefit pension plan, excluding side accounts, was 73%. In general, this means that for every dollar of future pension benefits due, PERS has approximately \$0.73 available for payment.
- Revenues of \$7,180.6 million (additions to fiduciary net position), which include member and employer contributions of \$3,440.1 million and investment activities totaling \$3,722.4 million, were up 36.6% for fiscal year 2023, compared to \$5,257.4 million in fiscal year 2022. This is primarily because of an increase in investment earnings.
- Expenses (deductions from fiduciary net position) increased 1.9% to \$6,624.2 million during the fiscal

year from \$6,497.8 million in fiscal year 2022. This was caused by a similar increase in benefit payments.

## **Fiduciary Net Position**

The condensed comparative summaries of Fiduciary Net Position on page 31 demonstrate that the pension trust funds are primarily focused on investments and net position (reserves).

- The net position of the Defined Benefit Pension Plan decreased approximately \$281.9 million, or 0.3%, during the fiscal year ended June 30, 2023. This was primarily caused by a combination of the increase in the fair value of investments and employer contributions being slightly less than the total of benefits paid and administrative expenses.
- The net position of the OPSRP IAP increased approximately \$529.2 million, or 4.3%, during the fiscal year ended June 30, 2023, primarily because of the increase in the fair value of investments.
- The net position of the Deferred Compensation Plan increased approximately \$305.2 million, or 12.2%, during the fiscal year ended June 30, 2023. This was caused by a \$311.9 million, or 12.6%, increase in the fair value of investments.
- The net position of the RHIA decreased approximately \$4.2 million, or 0.6%, during the fiscal year ended June 30, 2023, primarily because of a 13.0% decrease in employer contributions, offset by a significant increase in investment income of \$17.6 million. The RHIA fund loses money every year because the plan is overfunded, but losses this year were offset by the increase in investment earnings.
- The net position of the RHIPA increased approximately \$8.1 million, or 9.7%, during the fiscal year ended June 30, 2023, primarily because of an increase in investment income of \$2.8 million and an insignificant decrease in healthcare premium subsidies.

**TABLE 1**  
**FIDUCIARY NET POSITION, PENSION AND OTHER EMPLOYEE BENEFITS**  
(in thousands) As of June 30

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2023	2022	2023	2022	2023	2022
Cash and Receivables	\$ 5,898,794	\$ 7,436,005	\$ 1,109,557	\$ 1,171,302	\$ 20,387	\$ 24,212
Investments at Fair Value	82,762,870	80,873,065	12,448,328	11,770,343	2,798,711	2,486,727
Securities Lending						
Collateral	540,519	408,623	62,054	46,016	–	2
Other	23,745	30,994	657	1,091	–	–
Total Assets	<u>89,225,928</u>	<u>88,748,687</u>	<u>13,620,596</u>	<u>12,988,752</u>	<u>2,819,098</u>	<u>2,510,941</u>
Investment Purchases	5,122,830	4,528,482	531,065	450,715	7,769	5,071
Securities Lending						
Payable	540,502	408,711	62,052	46,026	–	2
Other Payables, Leases						
Payable and Def. Inflows	74,978	41,941	52,603	46,326	423	179
Total Liabilities and Deferred Inflows	<u>5,738,310</u>	<u>4,979,134</u>	<u>645,720</u>	<u>543,067</u>	<u>8,192</u>	<u>5,252</u>
Total Net Position	<u>\$ 83,487,618</u>	<u>\$ 83,769,553</u>	<u>\$ 12,974,876</u>	<u>\$ 12,445,685</u>	<u>\$ 2,810,906</u>	<u>\$ 2,505,689</u>

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

	Retirement Health Insurance Account		Retiree Health Insurance Premium Account	
	2023	2022	2023	2022
Cash and Receivables	\$ 45,453	\$ 57,832	\$ 7,049	\$ 7,478
Investments at Fair Value	727,139	713,945	89,713	80,059
Securities Lending				
Collateral	4,763	3,610	588	406
Other	40	75	5	9
Total Assets	<u>777,395</u>	<u>775,462</u>	<u>97,355</u>	<u>87,952</u>
Investment Purchases	43,261	38,421	5,040	4,023
Securities Lending				
Payable	4,763	3,611	588	406
Other Payables	2,820	2,730	329	195
Total Liabilities	<u>50,844</u>	<u>44,762</u>	<u>5,957</u>	<u>4,624</u>
Total Net Position	<u>\$ 726,551</u>	<u>\$ 730,700</u>	<u>\$ 91,398</u>	<u>\$ 83,328</u>

## 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 2023, the financial market recovered from the volatility experienced in the prior fiscal year. See the Investment Activities section on page 117 for further discussion.
- Defined Benefit Pension Plan: Total additions for fiscal year 2023 increased by \$484.5 million, or 9.7%, compared to fiscal year 2022, due primarily to better investment performance.
  - Employer Contributions decreased \$1,637.2 million in fiscal year 2023 compared to fiscal year 2022 primarily because of a decrease in new lump-sum deposits to side accounts.
  - Member Contributions, consisting primarily of redirected IAP contributions deposited to Employee Pension Stability Accounts (EPSA), increased \$7.4 million, or 4.6%.
- The Individual Account Program: Total additions increased \$793.7 million, or 192.9%, because of the \$731.2 million increase in Net Investment and Other Income.
- Deferred Compensation Plan: The Oregon Savings Growth Plan had a \$625.0 million increase in total

additions. Like the other plans, this increase was primarily caused by an increase of \$634.6 million in Net Investment and Other Income, compared to fiscal year 2022. Member Contributions decreased \$9.6 million, or 4.9%, from fiscal year 2022.

- Retirement Health Insurance Account: Total additions increased \$17.3 million, or 172.8%, primarily because of an increase of \$17.6 million in Net Investment and Other Income.
- Retiree Health Insurance Premium Account: Total additions increased \$2.8 million, or 30.9%, over the fiscal year 2022. This increase was primarily because of the \$2.3 million, or 296.9%, 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 \$5,746.5 million in fiscal year 2023, a \$204.7 million, or 3.7%, increase over fiscal year 2022, primarily because of the 3.7% increase in pension benefits paid caused by a 3.0% cost-of-living adjustment and a 46.7% increase in lump-sum installment payments and lump-sum death payouts.
- Individual Account Program: IAP benefit and other expenses decreased by \$80.9 million, or 10.7%, from fiscal year 2022. The decrease in IAP benefit payments is primarily caused by the 10.7% decrease in service retirements.
- Deferred Compensation Plan: Deferred compensation benefits and other expenses increased by \$3.7 million, or 2.3%, from fiscal year 2022 because of an increase in requests for rollovers and distributions.
- Retirement Health Insurance Account: RHIA healthcare premium and other expenses decreased by \$768,000, or 2.4%, from fiscal year 2022. This decrease was attributed to a \$815,000 or 2.7%, decrease in healthcare premium subsidies, which was primarily caused by the 5.0% decrease in participants to 40,703.
- Retiree Health Insurance Premium Account: RHIPA healthcare premium and other expenses decreased by \$349,000, or 8.5%, from fiscal year 2022 primarily because of a 12.4% decrease in healthcare premium subsidies.
- Tables 3 and 4 on the next page show condensed comparative summaries of the changes in fiduciary net position and reflect the activities of the plans administered by the System.



**TABLE 3**  
**CHANGES IN FIDUCIARY NET POSITION, PENSION AND OTHER EMPLOYEE BENEFITS**  
(in thousands) For the Fiscal Years Ended June 30

	Defined Benefit Pension Plan		Individual Account Program		Deferred Compensation Plan	
	2023	2022	2023	2022	2023	2022
Additions:						
Employer Contributions	\$ 2,392,963	\$ 4,030,159	\$ -	\$ -	\$ -	\$ -
Member Contributions	167,473	160,098	692,612	630,155	186,010	195,637
Net Investment and Other Income	2,904,088	789,785	512,596	(218,607)	285,740	(348,864)
Total Additions	<u>5,464,524</u>	<u>4,980,042</u>	<u>1,205,208</u>	<u>411,548</u>	<u>471,750</u>	<u>(153,227)</u>
Deductions:						
Pension Benefits	5,668,631	5,468,215	661,980	744,713	164,424	161,003
Other	77,828	73,590	14,038	12,158	2,109	1,835
Total Deductions	<u>5,746,459</u>	<u>5,541,805</u>	<u>676,018</u>	<u>756,871</u>	<u>166,533</u>	<u>162,838</u>
Net Increase (Decrease)	(281,935)	(561,763)	529,190	(345,323)	305,217	(316,065)
Net Position						
Beginning of Year	83,769,553	84,331,316	12,445,686	12,791,009	2,505,689	2,821,754
End of Year	<u>\$ 83,487,618</u>	<u>\$ 83,769,553</u>	<u>\$ 12,974,876</u>	<u>\$ 12,445,686</u>	<u>\$ 2,810,906</u>	<u>\$ 2,505,689</u>

**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	
	2023	2022	2023	2022
Additions:				
Employer Contributions	\$ 2,139	\$ 2,459	\$ 8,783	\$ 8,265
Net Investment and Other Income	25,157	7,547	3,036	765
Total Additions	<u>27,296</u>	<u>10,006</u>	<u>11,819</u>	<u>9,030</u>
Deductions:				
Healthcare Premium				
Subsidies	29,794	30,609	3,007	3,432
Other	1,651	1,604	742	666
Total Deductions	<u>31,445</u>	<u>32,213</u>	<u>3,749</u>	<u>4,098</u>
Net Increase (Decrease)	(4,149)	(22,207)	8,070	4,932
Net Position				
Beginning of Year	730,700	752,907	83,328	78,396
End of Year	<u>\$ 726,551</u>	<u>\$ 730,700</u>	<u>\$ 91,398</u>	<u>\$ 83,328</u>

## 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, 2023, was \$91.5 million, which was a \$2.0 million, or 2.1%, decrease from fiscal year 2022. This was primarily due to claims and administrative expenses exceeding insurance premium revenue by \$4.9 million. There was a \$2.3 million increase in interest, dividends, and other investment income over 2022, which explains why the net decrease in 2002 of \$6.3 million improved to a net decrease of \$2.0 million in 2023.

## CHANGES IN NET POSITION

- SRHIA insurance premiums revenue for the fiscal year ended June 30, 2023, was \$28.4 million, which was 0.4% higher than fiscal year 2022 because of the decrease in retirees participating in the program from 51,708 as of June 30, 2022 to 50,103 as of June 30, 2023, offset by a similar increase in Medicare and non-Medicare premium rates.
- SRHIA healthcare and other expenses for the fiscal year ended June 30, 2023, decreased \$1.9 million, or 5.4%, from fiscal year 2022 primarily because of a reduction in claims.

Tables 5 and 6 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**

	<b>Standard Retiree Health Insurance Account</b>	
	<u>2023</u>	<u>2022</u>
Cash and Receivables	\$ 94,346	\$ 95,984
Net OPEB Asset	18	12
Securities Lending Collateral	38	541
Total Assets	<u>94,402</u>	<u>96,537</u>
Deferred Outflows of Resources:		
Pensions	270	200
OPEB	3	2
Total Deferred Outflows of Resources	<u>273</u>	<u>202</u>
Claims Payable	876	848
Other Current Liabilities	1,519	1,309
Net Pension Liability	545	286
Other Noncurrent Liabilities	34	43
Total Liabilities	<u>2,974</u>	<u>3,027</u>
Deferred Inflows of Resources:		
Pensions	163	223
OPEB	11	11
Total Deferred Inflows of Resources	<u>174</u>	<u>234</u>
Total Net Position	<u>\$ 91,527</u>	<u>\$ 93,478</u>

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

	<b>Standard Retiree Health Insurance Account</b>	
	<u>2023</u>	<u>2022</u>
Revenues:		
Insurance Premiums	\$ 28,412	\$ 28,296
Investment Income	2,975	612
Total Revenues	<u>31,387</u>	<u>28,908</u>
Expenses:		
Claims	28,118	31,035
Change in Estimated Liabilities	28	18
Administrative Expense	5,192	4,187
Total Expenses	<u>33,338</u>	<u>35,240</u>
Net Decrease	(1,951)	(6,332)
Net Position		
Beginning of Year	93,478	99,810
End of Year	<u>\$ 91,527</u>	<u>\$ 93,478</u>

### **Net Pension Liability**

The Employers' Net Pension Liability (NPL) as of June 30, 2023, was \$18,730.7 million, compared to a Net Pension Liability of \$15,312.0 million as of June 30, 2022. The \$3,118.7 million, or 20.4%, increase in Employers' Net Pension Liability was primarily due to a \$282.0 million decrease in Fiduciary Net Position and a \$3,136.7 million increase in Total Pension Liability.

### **Net OPEB Liability/(Asset)**

The Employers' Net OPEB Asset for RHIA as of June 30, 2023, was \$366.2 million, compared to the Net OPEB Asset of \$355.3 million as of June 30, 2022. The increase in Employers' Net OPEB Asset was primarily due to a \$15.0 million decrease in Total OPEB Liability. The Employer's Net OPEB Asset for RHIPA as of June 30, 2023, was \$44.1 million, compared to the Net OPEB Asset of \$34.2 million as of June 30, 2022. The increase in Employers' Net OPEB Asset was primarily due to an \$8.1 million increase in the Fiduciary Net Position.

### **Investment Activities**

During fiscal year 2023, investments increased 3.0% over the prior fiscal year as markets moved toward increased stability. Holdings in all asset classes experienced positive investment returns. The Private Equity portfolio increased by \$1,600.0 million, or 6.5%; Public Equity portfolio decreased \$689.0 million, or 2.9%; the Real Assets portfolio increased \$1,486.7 million, or 19.8%; the Real Estate portfolio decreased \$3.3 million, or 0.1%; the Debt Securities portfolio increased \$581.2 million, or 3.0%; and the Opportunity portfolio increased \$200.8 million, or 8.9%. One-year returns on asset classes and comparative benchmarks are presented in Table 9 of this section.

## PLAN MEMBERSHIP

Table 7 reflects the Defined Benefit Pension Plan membership as of the end of the fiscal years.

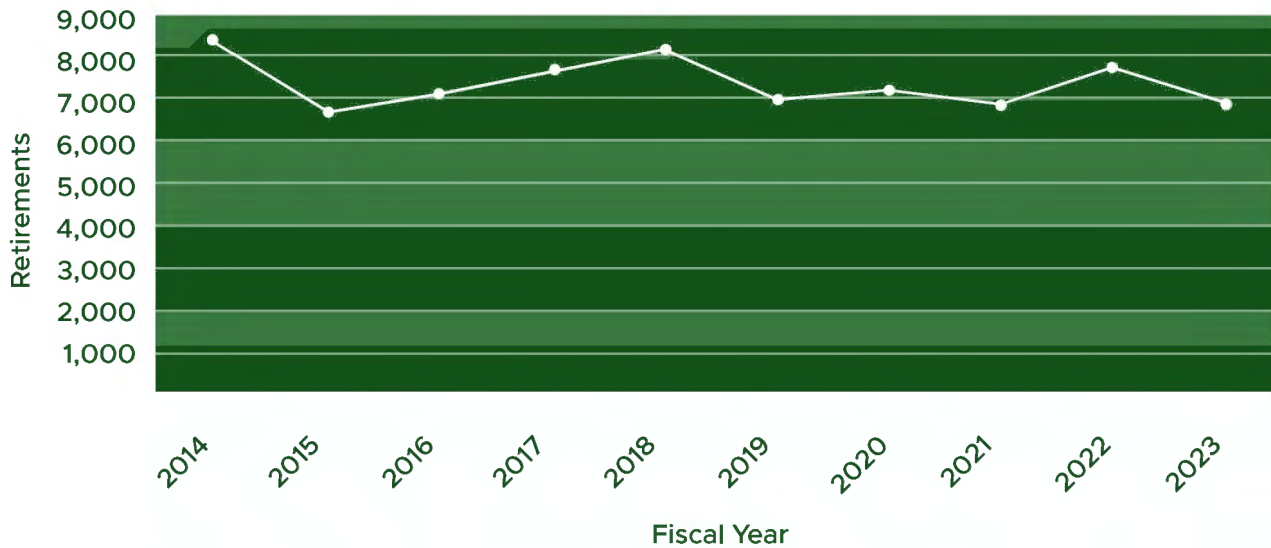
**TABLE 7**  
**CHANGES IN PLAN MEMBERSHIP**  
**As of June 30**

	<u>2023</u>	<u>2022</u>	<u>Percentage Change</u>
Active members:			
General	172,702	165,299	4.5 %
Police and Fire	<u>16,034</u>	<u>15,641</u>	2.5
Subtotal - Active members	<u>188,736</u>	<u>180,940</u>	4.3
Retirees and Inactive members:			
Receiving Benefits:			
General	149,347	146,712	1.8
Police and Fire	14,190	13,614	4.2
Not Receiving Benefits:			
General	50,511	49,320	2.4
Police and Fire	<u>2,589</u>	<u>2,494</u>	3.8
Subtotal - Inactive members	<u>216,637</u>	<u>212,140</u>	2.1
Total members	<u>405,373</u>	<u>393,080</u>	3.1 %

## RETIREMENTS FROM SERVICE

Retirements from service decreased 10.7% in fiscal year 2023. Service retirements in fiscal year 2023 were 6,975 compared to 7,811 in fiscal year 2022.

**TABLE 8  
RETIREMENTS FROM SERVICE BY FISCAL YEAR**



**CURRENTLY KNOWN FACTS, CONDITIONS, OR DECISIONS**

There are no currently known facts, conditions, or decisions that are expected to have a significant effect on the System’s financial position or results of operations.

**CONTACTING THE SYSTEM’S FINANCIAL MANAGEMENT**

This financial report is designed to provide plan participants, employers, citizens, taxpayers, and others with a general overview of the System’s finances and to demonstrate the Board’s oversight of the System. If you have questions about this report or need additional financial information, please contact the Financial Services Division administrator:

**Mail**

P.O. Box 23700  
Tigard, Oregon 97281-3700

**Email**

[pers.gasb.questions@pers.oregon.gov](mailto:pers.gasb.questions@pers.oregon.gov)

**Table 9**  
**Investment Results\***  
**Fiscal Years Ended June 30, 2023 and 2022**

	<b>2023</b>	<b>2022</b>
Total Portfolio, Excluding Variable Account	3.17 %	6.32 %
Policy Benchmark <sup>1</sup>	3.73	(0.66)
Variable Account	16.42	(16.21)
Benchmark: MSCI All Country World Investable Market Index Net	16.14	(16.52)
Domestic Stocks	16.16	(12.92)
Benchmark: Russell 3000 Index	18.95	(13.87)
International Stocks	14.99	(16.47)
Benchmark: MSCI All Country World ex-US Investable Market Index Net	12.47	(19.86)
Fixed Income Segment	0.70	(9.05)
Benchmark: Oregon Custom Index <sup>2</sup>	(0.94)	(10.12)
Risk Parity <sup>3</sup>	n/a	(12.95)
Benchmark: S&P Risk Parity - 12% Target Volatility	n/a	(6.67)
Real Estate	(1.38)	29.61
Benchmark: Oregon Custom Real Estate Benchmark <sup>4</sup>	(3.91)	27.26
Private Equity	(1.84)	24.23
Benchmark: Russell 3000 Index + 300 bps (Adj.) <sup>5</sup>	(5.81)	15.25
Real Assets	9.54	23.15
Benchmark: Consumer Price Index + 400 bps	7.08	13.39
Diversifying Strategies	5.83	17.09
Benchmark: HFRI FOF Conservative Index	3.47	0.13
Opportunity Portfolio	6.10	10.19
Benchmark: OPERF Policy Benchmark <sup>6</sup>	3.73	14.47

The rates of return reported in the Investment Section are based on a time-weighted rate of return methodology based upon fair 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.

<sup>1</sup> From July 1, 2020 to September 30, 2021 the policy benchmark was 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. From October 1, 2021 to March 31, 2023 the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 20% BBG U.S. Aggregate, 12.50% NCRIF ODCE (Custom), 30% MSCI ACWI IMI Net, 7.50% CPI+4%, 7.50% HFRI FOF Conservative Index and 2.50 % S&P Risk Parity - 12% Target Volatility. From April 1, 2023 to Present, the policy benchmark is 20% Russell 3000+300Bps quarter lag, 25% BBG U.S. Aggregate, 12.50% NCRIF ODCE (Custom), 27.5% MSCI ACWI IMI Net, 7.50% CPI+4% and 7.50% HFRI FOF Conservative Index.

<sup>2</sup> From March 1, 2016 to September 30, 2021, index was 46% BBG Aggregate Bond, 37% BBG Treasury, 13% S&P LSTA and 4% BofA ML High Yield Master II. From October 1, 2021 to Present, index is 100% Bloomberg U.S. Aggregate.

<sup>3</sup> Allocation to Risk Parity was eliminated 12/7/2022.

<sup>4</sup> 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.

<sup>5</sup> 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.

<sup>6</sup> From September 1, 2006 to March 31, 2023, the policy benchmark was 100% CPI+5%. From April 1, 2023 to Present, benchmark is 100% OPERF policy benchmark. The 1-Year return of 3.73% represents the OPERF policy benchmark.

## Basic Financial Statements

**Statement of Fiduciary Net Position**  
**Pension and Other Postemployment Plans**  
**As of June 30, 2023, with Comparative Totals as of June 30, 2022**

	<u>Defined Benefit OPEB Plans</u>			
	<u>Defined Benefit Pension Plan</u>	<u>Oregon Public Service Retirement Plan Individual Account Program</u>	<u>Retirement Health Insurance Account</u>	<u>Retiree Health Insurance Premium Account</u>
<b>Assets:</b>				
Cash and Cash Equivalents	\$ 2,114,119,006	\$ 675,076,928	\$ 13,731,977	\$ 2,359,520
Receivables:				
Employer	116,675,021	-	1,915,239	987,661
Plan Member	-	45,208,868	-	-
Interest and Dividends	251,724,982	28,851,332	2,218,180	273,674
Member Loans	-	-	-	-
Investment Sales and Other Receivables	3,141,238,053	360,357,563	27,587,312	3,426,752
Leases	-	-	-	-
Transition Liability	243,198,241	-	-	-
Total Receivables	<u>3,752,836,297</u>	<u>434,417,763</u>	<u>31,720,731</u>	<u>4,688,087</u>
Due from Other Funds	31,839,506	61,695	173	865
Investments:				
Debt Securities	16,020,046,819	3,128,703,953	141,167,361	17,416,927
Public Equity	16,927,357,995	3,610,049,974	147,001,647	18,136,748
Real Estate and Real Estate Investment Trusts	11,988,807,591	1,374,091,138	105,644,406	13,034,180
Private Equity	23,288,326,230	2,669,179,770	205,214,854	25,318,969
Real Assets	7,986,001,641	915,311,552	70,372,003	8,682,347
Diversifying Strategies	4,374,229,444	501,350,102	38,545,357	4,755,644
Opportunity Portfolio	2,178,100,065	249,641,841	19,193,242	2,368,021
Total Investments	<u>82,762,869,785</u>	<u>12,448,328,330</u>	<u>727,138,870</u>	<u>89,712,836</u>
Securities Lending Collateral	540,518,908	62,053,616	4,762,651	587,741
Prepaid Expenses	5,750,276	523,909	40,280	4,970
Capital Assets at Cost, Net	17,994,564	133,394	-	-
<b>Total Assets</b>	<b><u>89,225,928,342</u></b>	<b><u>13,620,595,635</u></b>	<b><u>777,394,682</u></b>	<b><u>97,354,019</u></b>
<b>Liabilities:</b>				
Investment Purchases and Accrued Expenses	5,122,830,498	531,064,892	43,261,433	5,039,721
Deposits and Other Liabilities	68,943,575	27,240,190	2,718,283	135,843
Due to Other Funds	5,997,666	25,362,785	101,570	193,184
Leases Payable	36,380	-	-	-
Securities Lending Collateral Due Borrowers	540,502,157	62,051,696	4,762,503	587,723
<b>Total Liabilities</b>	<b><u>5,738,310,276</u></b>	<b><u>645,719,563</u></b>	<b><u>50,843,789</u></b>	<b><u>5,956,471</u></b>
<b>Deferred Inflows of Resources:</b>				
Leases, net of Amortization	-	-	-	-
<b>Net Position:</b>				
Restricted for:				
Pension	83,487,618,066	-	-	-
Individual Account Program	-	12,974,876,072	-	-
Other Postemployment Benefits	-	-	726,550,893	91,397,548
Deferred Compensation Plan	-	-	-	-
<b>Total Net Position</b>	<b><u>\$ 83,487,618,066</u></b>	<b><u>\$ 12,974,876,072</u></b>	<b><u>\$ 726,550,893</u></b>	<b><u>\$ 91,397,548</u></b>

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

Continued on the next page.



Deferred Compensation Plan		2023	2022
\$	6,298,479	\$ 2,811,585,910	\$ 4,871,863,273
	—	119,577,921	47,486,446
	—	45,208,868	27,901,002
	960,518	284,028,686	155,423,369
	13,128,058	13,128,058	13,354,659
	—	3,532,609,680	3,251,639,426
	—	—	242,030
	—	243,198,241	305,741,323
	14,088,576	4,237,751,454	3,801,788,255
	—	31,902,239	23,177,382
	475,124,209	19,782,459,269	19,201,300,293
	2,323,587,289	23,026,133,653	23,715,061,151
	—	13,481,577,315	13,484,899,469
	—	26,188,039,823	24,588,062,306
	—	8,980,367,543	7,493,706,329
	—	4,918,880,547	5,192,616,827
	—	2,449,303,169	2,248,492,239
	2,798,711,498	98,826,761,319	95,924,138,614
	256	607,923,172	458,656,998
	—	6,319,435	11,138,499
	—	18,127,958	21,029,805
	<b>2,819,098,809</b>	<b>106,540,371,487</b>	<b>105,111,792,826</b>
	7,769,157	5,709,965,701	5,026,711,580
	313,660	99,351,551	67,583,566
	109,273	31,764,478	23,058,303
	—	36,380	488,211
	256	607,904,335	458,755,508
	<b>8,192,346</b>	<b>6,449,022,445</b>	<b>5,576,597,168</b>
	—	—	<b>241,340</b>
	—	83,487,618,066	83,769,552,854
	—	12,974,876,072	12,445,685,673
	—	817,948,441	814,027,493
	2,810,906,463	2,810,906,463	2,505,688,298
\$	<b>2,810,906,463</b>	<b>\$ 100,091,349,042</b>	<b>\$ 99,534,954,318</b>

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**Statement of Changes in Fiduciary Net Position  
Pension and Other Postemployment Plans  
For the Fiscal Year Ended June 30, 2023, with Comparative Totals for the Fiscal Year Ended June 30, 2022**

	<b>Defined Benefit OPEB Plans</b>			
	<b>Defined Benefit Pension Plan</b>	<b>Oregon Public Service Retirement Plan Individual Account Program</b>	<b>Retirement Health Insurance Account</b>	<b>Retiree Health Insurance Premium Account</b>
<b>Additions:</b>				
Contributions:				
Employer	\$ 2,392,962,472	\$ -	\$ 2,138,751	\$ 8,782,913
Plan Member	167,473,325	692,611,666	-	-
Total Contributions	<u>2,560,435,797</u>	<u>692,611,666</u>	<u>2,138,751</u>	<u>8,782,913</u>
Investment Income:				
Net Appreciation/(Depreciation) in Fair Value of Investments	1,948,452,207	394,143,701	16,772,502	2,042,156
Interest, Dividends and Other Investment Income	2,007,085,207	237,627,900	17,662,527	2,096,671
Total Investment Income	<u>3,955,537,414</u>	<u>631,771,601</u>	<u>34,435,029</u>	<u>4,138,827</u>
Less Investment Expense	(1,056,273,563)	(123,405,052)	(9,300,584)	(1,105,178)
Net Investment Income	<u>2,899,263,851</u>	<u>508,366,549</u>	<u>25,134,445</u>	<u>3,033,649</u>
Securities Lending Income:				
Securities Lending Income	19,594,981	2,193,950	172,569	20,404
Less Securities Lending Expense	(16,948,216)	(1,898,621)	(149,252)	(17,652)
Net Securities Lending Income	<u>2,646,765</u>	<u>295,329</u>	<u>23,317</u>	<u>2,752</u>
Other Income	2,177,099	3,934,525	-	-
<b>Total Additions</b>	<u>5,464,523,512</u>	<u>1,205,208,069</u>	<u>27,296,513</u>	<u>11,819,314</u>
<b>Deductions:</b>				
Benefits	5,664,539,881	661,979,840	-	-
Death Benefits	4,090,901	-	-	-
Refunds of Contributions	10,172,498	-	-	-
Administrative Expense	67,655,020	14,037,830	1,651,347	741,986
Healthcare Premium Subsidies	-	-	29,793,960	3,007,586
<b>Total Deductions</b>	<u>5,746,458,300</u>	<u>676,017,670</u>	<u>31,445,307</u>	<u>3,749,572</u>
<b>Net Increase/(Decrease)</b>	<b>(281,934,788)</b>	<b>529,190,399</b>	<b>(4,148,794)</b>	<b>8,069,742</b>
<b>Net Position</b>				
<b>Beginning of Year</b>	<u>83,769,552,854</u>	<u>\$ 12,445,685,673</u>	<u>\$ 730,699,687</u>	<u>\$ 83,327,806</u>
<b>End of Year</b>	<u>\$ 83,487,618,066</u>	<u>\$ 12,974,876,072</u>	<u>\$ 726,550,893</u>	<u>\$ 91,397,548</u>

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

Continued on the next page.

Deferred Compensation Plan		
	2023	2022
\$		\$
-	2,403,884,136	4,040,882,000
186,009,988	1,046,094,979	985,890,634
<u>186,009,988</u>	<u>3,449,979,115</u>	<u>5,026,772,634</u>
269,696,985	2,631,107,551	(547,515,321)
<u>20,140,586</u>	<u>2,284,612,891</u>	<u>2,199,783,729</u>
289,837,571	4,915,720,442	1,652,268,408
<u>(6,220,874)</u>	<u>(1,196,305,251)</u>	<u>(1,442,410,880)</u>
283,616,697	3,719,415,191	209,857,528
19	21,981,923	6,774,237
<u>(19)</u>	<u>(19,013,760)</u>	<u>(2,392,237)</u>
-	2,968,163	4,382,000
2,123,333	8,234,957	16,384,910
<u>471,750,018</u>	<u>7,180,597,426</u>	<u>5,257,397,072</u>
164,423,617	6,490,943,338	6,368,198,702
-	4,090,901	5,732,332
-	10,172,498	14,893,205
2,108,236	86,194,419	74,959,193
<u>-</u>	<u>32,801,546</u>	<u>34,041,296</u>
166,531,853	6,624,202,702	6,497,824,728
<b>305,218,165</b>	556,394,724	<b>(1,240,427,656)</b>
\$	\$	\$
2,505,688,298	99,534,954,318	100,775,381,974
<u><b>2,810,906,463</b></u>	<u><b>100,091,349,042</b></u>	<u><b>99,534,954,318</b></u>

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Statement of Net Position  
Proprietary Fund  
As of June 30, 2023, with Comparative Totals as of June 30, 2022

	Enterprise Fund	
	Standard Retiree Health Insurance Account	
	2023	2022
<b>Assets:</b>		
<b>Current Assets</b>		
Cash and Cash Equivalents	\$ 94,345,557	\$ 95,984,305
Securities Lending Collateral	38,031	540,718
<b>Total Current Assets</b>	<b>94,383,588</b>	<b>96,525,023</b>
<b>Noncurrent Assets</b>		
Net OPEB Asset	18,059	12,201
<b>Total Noncurrent Assets</b>	<b>18,059</b>	<b>12,201</b>
<b>Total Assets</b>	<b>94,401,647</b>	<b>96,537,224</b>
<b>Deferred Outflows of Resources</b>		
Pension	270,477	199,506
OPEB	2,645	2,087
<b>Total Deferred Outflows of Resources</b>	<b>273,122</b>	<b>201,593</b>
<b>Liabilities:</b>		
<b>Current Liabilities</b>		
Accrued Expenses	1,311,061	1,153,819
Compensated Absences	29,776	34,089
Due to Other Funds	137,761	119,079
Estimated Insurance Claims Due	876,000	848,000
Pension Obligation Bonds	2,267	2,283
Securities Lending Collateral Due Borrowers	38,031	540,718
<b>Total Current Liabilities</b>	<b>2,394,896</b>	<b>2,697,988</b>
<b>Noncurrent Liabilities</b>		
Compensated Absences	16,749	19,175
Pension Obligation Bonds	9,262	12,426
Other Liabilities	8,166	11,320
Net Pension Liability	544,992	286,029
<b>Total Noncurrent Liabilities</b>	<b>579,169</b>	<b>328,950</b>
<b>Total Liabilities</b>	<b>2,974,065</b>	<b>3,026,938</b>
<b>Deferred Inflows of Resources</b>		
Pension	163,281	223,312
OPEB	10,658	11,047
<b>Total Deferred Inflows of Resources</b>	<b>173,939</b>	<b>234,359</b>
<b>Net Position:</b>		
Restricted for:		
OPEB	10,046	3,241
Unrestricted	91,516,719	93,474,279
<b>Total Net Position</b>	<b>\$ 91,526,765</b>	<b>\$ 93,477,520</b>

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, 2023, with Comparative Totals for the Fiscal Year Ended June 30, 2022**

	<b>Enterprise Fund</b>	
	<b>Standard Retiree Health Insurance Account</b>	
	<b>2023</b>	<b>2022</b>
<b>Operating Revenues:</b>		
Insurance Premium Revenue	\$ 28,412,179	\$ 28,295,570
Total Operating Revenues	<u>28,412,179</u>	<u>28,295,570</u>
<b>Operating Expenses:</b>		
Claims Expense	28,118,167	31,035,409
Increase in Estimated Liabilities	28,000	18,000
Administrative Expense	5,191,371	4,187,165
Total Operating Expenses	<u>33,337,538</u>	<u>35,240,574</u>
<b>Operating Loss</b>	<b>(4,925,359)</b>	<b>(6,945,004)</b>
<b>Non-Operating Revenues:</b>		
Interest, Dividends, and Other Investment Income	2,974,604	612,086
Securities Lending Income	8,045	1,179
Less Securities Lending Expense	<u>(8,045)</u>	<u>(1,179)</u>
Net Securities Lending Income	-	-
Total Non-Operating Revenues	<u>2,974,604</u>	<u>612,086</u>
Change in Net Position	(1,950,755)	(6,332,918)
<b>Total Net Position</b>		
<b>Beginning of Year</b>	<u>93,477,520</u>	<u>99,810,438</u>
<b>End of Year</b>	<b>\$ <u>91,526,765</u></b>	<b>\$ <u>93,477,520</u></b>

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

**Statement of Cash Flows**

**Proprietary Fund**

**For the Fiscal Year Ended June 30, 2023, with Comparative Totals for the Fiscal Year Ended June 30, 2022**

	<b>Enterprise Fund</b>	
	<b>Standard Retiree Health Insurance Account</b>	
	<b>2023</b>	<b>2022</b>
<b>Cash Flows from Operating Activities:</b>		
Insurance Premiums	\$ 28,412,179	\$ 28,295,570
Claims Paid	(28,118,167)	(31,035,409)
Other Payments	(4,907,364)	(3,911,927)
<b>Net Cash Used for Operating Activities</b>	<b>(4,613,352)</b>	<b>(6,651,766)</b>
<b>Cash Flows from Investing Activities:</b>		
Interest and Dividends Received	2,974,604	612,086
<b>Net Decrease in Cash and Cash Equivalents</b>	<b>(1,638,748)</b>	<b>(6,039,680)</b>
<b>Cash and Cash Equivalents Beginning of Year</b>	<b>95,984,305</b>	<b>102,023,985</b>
<b>Cash and Cash Equivalents End of Year</b>	<b>\$ 94,345,557</b>	<b>\$ 95,984,305</b>
<b>Reconciliation of Operating Loss to Net Cash Used for Operating Activities</b>		
Operating Loss	\$ (4,925,359)	\$ (6,945,004)
Adjustments to reconcile operating loss to net cash used for operating activities:		
Changes in assets, deferred outflows of resources, liabilities, and deferred inflows of resources:		
Net OPEB Asset	(5,858)	(10,399)
Deferred Outflows of Resources - Pension	(70,971)	(15,475)
Deferred Outflows of Resources - OPEB	(558)	300
Accrued Expenses	157,242	313,242
Compensated Absences	(6,739)	13,121
Due to Other Funds	18,682	19,906
Estimated Insurance Claims Due	28,000	18,000
Pension Obligation Bonds	(3,180)	(2,604)
Other Liabilities	(3,154)	838
Net Pension Liability	258,963	(263,156)
Deferred Inflows of Resources - Pension	(60,031)	210,835
Deferred Inflows of Resources - OPEB	(389)	8,630
<b>Net Cash Used for Operating Activities</b>	<b>\$ (4,613,352)</b>	<b>\$ (6,651,766)</b>

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 other postemployment benefits (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 based on the fiscal year ended June 30, 2023. They are prepared 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, OPEB, and deferred compensation activities are accounted for in four pension and other postemployment benefit trust funds and one other employee benefit fund:

- 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): an other employee benefit fund.

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 nonoperating 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 operating expenses include claims and administrative expenses. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses. Deferred outflows of resources related to pension and OPEB that result from contributions made subsequent to the measurement date will be recognized as a reduction of the net pension liability and net OPEB liability or as 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 nonvoting 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 — that is 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. Investments are reported on the trade date.

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

Investments in real estate, other than publicly traded REITs, for which observable market prices in active markets do not exist, are reported at fair value as of June 30, 2023, 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. 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. Several 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 the financing of transactions subsequent to the acquisition of the investment.

Investments in private equities are recorded at fair value as of June 30, 2023, 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, Real Assets, and Diversifying Strategies portfolios are recorded at fair value as of June 30, 2023, by the respective general partner or account manager. Investments in the Opportunity, Real Assets, and Diversifying Strategies 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 the investment valuations of the Real Estate, Private Equity, Opportunity, Real Assets and diversifying strategies portfolios, 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, Real Assets, and Diversifying Strategies. 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.

**TABLE 1**

<b>Asset Class</b>	<b>Target Allocation</b>
Cash	0.0%
Debt Securities	25.0%
Public Equity	27.5%
Private Equity	20.0%
Real Estate	12.5%
Real Assets	7.5%
Diversifying Strategies	7.5%
<b>Total</b>	<b><u>100.0%</u></b>

**E. LEASES**

For GASB 87 reporting, lease expenses are immaterial to the pension trust funds. Certain lease assets meet the capitalization threshold set by the state but are still considered immaterial to the pension trust fund. Leases meeting that threshold of total lease payments of \$5,000 for lessors and \$250,000 for lessees have been disclosed in Note 5, Capital Assets, including information regarding Lease Obligations. PERS’ leases are included in the financial reporting of the State of Oregon.

**F. EARNINGS CREDITING**

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

## **G. ADMINISTRATIVE COSTS**

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

## **H. USE OF ESTIMATES IN THE PREPARATION OF FINANCIAL STATEMENTS**

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

## **I. COMPARATIVE TOTALS**

The basic financial statements include certain prior-year summarized comparative information in total but not at the level of detail required for a presentation in conformity with the accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements as of and for the fiscal year ended June 30, 2022, from which the summarized information was derived.

## **J. EFFECT OF NEW GOVERNMENTAL ACCOUNTING STANDARDS BOARD (GASB) PRONOUNCEMENT GASB STATEMENT NO. 96**

GASB Statement No. 96, Subscription-Based Information Technology Arrangements, was issued in May 2020. This statement provides guidance on accounting and financial reporting for subscription-based information technology arrangements (SBITAs). The guidance requires the recognition of a right-to-use subscription asset and a corresponding subscription liability for contracts that convey control of the right-to-use another party's information technology software alone or in conjunction with tangible capital assets for a specified time period in an exchange or exchange-like transaction. The requirements of this statement are similar to those of GASB Statement No. 87, Leases. The requirements of this statement are effective with fiscal years beginning after June 15, 2022. PERS completed an evaluation of GASB Statement No. 96 and determined that the recognition and measurement criteria applied to PERS' current information technology arrangement population would not have a significant impact. Therefore, there are no new SBITA disclosures included in PERS' June 30, 2023 financial statements.

## **K. RECLASSIFICATIONS**

We have made reclassifications to certain comparative totals as of June 30, 2022, to conform to the presentation as of June 30, 2023.

## **Note 2 - Description of Plan**

### **A. ORGANIZATION**

PERS administers a cost-sharing, multiple-employer defined benefit pension plan (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, 2023, there were 897 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.

TABLE 2

Plan Membership as of June 30, 2023	Employers	Defined Benefit Plan				Postemployment Healthcare	
		Tier One	Tier Two	OPSRP	Total	RHIA	RHIPA
Employers							
State Agencies	108						
Political Subdivisions	479						
Community Colleges	17						
School Districts	293						
<b>Total Employers</b>	<b>897</b>						
Inactive Members - General Service							
Retirees and Beneficiaries Currently Receiving Benefits		114,895	20,194	11,202	146,291	38,402	428
Alternate Payees Currently Receiving Benefits		2,832	176	48	3,056	n/a	n/a
<b>Inactive Members - General Service Receiving Benefits</b>		<b>117,727</b>	<b>20,370</b>	<b>11,250</b>	<b>149,347</b>	<b>38,402</b>	<b>428</b>
Inactive Members Eligible for, but not yet Receiving Benefits		5,961	5,486	9,058	20,505	11,103	n/a
Inactive Members Eligible for Refund Value of Account Only		1,360	6,735	n/a <sup>1</sup>	8,095	n/a	n/a
Inactive Members not Eligible for Refund or Retirement		0	0	21,911	21,911	n/a	n/a
<b>Inactive Members - General Service Not Receiving Benefits</b>		<b>7,321</b>	<b>12,221</b>	<b>30,969</b>	<b>50,511</b>	<b>11,103</b>	<b>–</b>
<b>Total Inactive Members - General Service</b>		<b>125,048</b>	<b>32,591</b>	<b>42,219</b>	<b>199,858</b>	<b>49,505</b>	<b>428</b>
Inactive Members - Police and Fire							
Retirees and Beneficiaries Currently Receiving Benefits		10,568	2,231	697	13,496	2,301	101
Alternate Payees Currently Receiving Benefits		636	46	12	694	n/a	n/a
<b>Inactive Members - Police and Fire Receiving Benefits</b>		<b>11,204</b>	<b>2,277</b>	<b>709</b>	<b>14,190</b>	<b>2,301</b>	<b>101</b>
Inactive Members Eligible for, but not yet Receiving Benefits		222	340	434	996	607	n/a
Inactive Members Eligible for Refund Value of Account Only		23	274	n/a <sup>1</sup>	297	n/a	n/a
Inactive Members not Eligible for Refund or Retirement		0	0	1,296	1,296	n/a	n/a
<b>Inactive Members - Police and Fire Not Receiving Benefits</b>		<b>245</b>	<b>614</b>	<b>1,730</b>	<b>2,589</b>	<b>607</b>	<b>–</b>
<b>Total Inactive Members - Police and Fire</b>		<b>11,449</b>	<b>2,891</b>	<b>2,439</b>	<b>16,779</b>	<b>2,908</b>	<b>101</b>
Active Members - General Service							
State Agencies		2,814	5,622	38,755	47,191	8,319	8,396
School Districts		3,610	10,440	62,620	76,670	13,983	n/a
Political Subdivisions		2,190	5,357	34,095	41,642	7,502	n/a
Community Colleges		334	973	5,892	7,199	1,302	n/a
<b>Total Active Members - General Service</b>		<b>8,948</b>	<b>22,392</b>	<b>141,362</b>	<b>172,702</b>	<b>31,106</b>	<b>8,396</b>
Active Members - Police and Fire							
State Agencies		263	1,082	4,764	6,109	1,343	1,320
School Districts		4	21	72	97	24	n/a
Political Subdivisions		286	1,743	7,778	9,807	2,029	n/a
Community Colleges		1	5	15	21	6	n/a
<b>Total Active Members - Police and Fire</b>		<b>554</b>	<b>2,851</b>	<b>12,629</b>	<b>16,034</b>	<b>3,402</b>	<b>1,320</b>
<b>Grand Total Members</b>		<b>145,999</b>	<b>60,725</b>	<b>198,649</b>	<b>405,373</b>	<b>86,921</b>	<b>10,245</b>

<sup>1</sup> Defined benefit only. No individual accounts are maintained.

## **B. PLAN MEMBERSHIP**

Table 2 shows data about employers, retirees, active members, and inactive members as of June 30, 2023.

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

As of June 30, 2023, Tier One was comprised of 9,502 active plan members, 128,931 retired plan members or their beneficiaries currently receiving benefits, and 7,566 inactive plan members entitled to but not yet receiving benefits for a total of 145,999 members. For Tier Two, as of June 30, 2023, there were 25,243 active plan members, 22,647 retired plan members or their beneficiaries currently receiving benefits, and 12,835 inactive plan members entitled to but not yet receiving benefits for a total of 60,725.

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 for the OPSRP Pension Program includes public employees hired on or after August 29, 2003. 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.

As of June 30, 2023, there were 153,991 active plan members, 11,959 retired plan members or their beneficiaries currently receiving benefits, 9,492 inactive plan members entitled to but not yet receiving benefits, and 23,207 inactive plan members not eligible for refund or retirement for a total of 198,649 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 retained their existing Regular or Variable (if applicable) accounts, but member contributions as of January 1, 2004, were deposited into the member's IAP account. IAP accounts are credited with earnings and losses net of administrative expenses.

## **C. PLAN BENEFITS**

### **1. PERS PENSION (CHAPTER 238 — TIER ONE/TIER TWO)**

#### ***a. 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 most commonly based on years of service and final average salary. A percentage (2.0% for Police and Fire employees, 1.67% 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 they are entitled.

Under Senate Bill (SB) 1049, passed during the 2019 legislative session, the salary included in the determination of final average salary is limited for all members beginning in 2021. The limit was equal to \$225,533 as of January 1, 2023, and it is indexed with inflation every year.

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 they have contributions in each of five calendar years or have 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% by the final average salary for the first 16 years of service and 1.67% 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% of final average salary. The Plan B retirement allowance for judge members is computed by multiplying 3.75% by the final average salary for the first 16 years of service and 2.0% of the final average salary multiplied by the number of years of service as a judge in excess of 16. For most judge members, the maximum amount is limited to 75% 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 under Plan B before age 65.

### ***b. 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 \$200 per month for deaths that occur after July 30, 2003.

As of 2020, the Legislature introduced an Optional Spouse Death Benefit (OSDB) which may provide a higher survivor benefit than the standard pre-retirement death benefit described above. To be eligible for the OSDB, the member must have died before retiring, named their spouse or other person who is constitutionally required to be treated in the same manner as the spouse as their pre-retirement beneficiary, and met the following conditions:

- Member's date of death must be on or after January 1, 2020.
- Member's account must be eligible for the employer-matching death benefit (as described above).
- Member must have a surviving spouse.
- Surviving spouse must be member's sole beneficiary as determined by a valid Tier One/Tier Two Pre-retirement Beneficiary Designation form on file with PERS.

Surviving spouse must make written election no later than 60 days after member's date of death. For members who die before their earliest retirement date, the OSDB is the actuarial equivalent of 50% of the service retirement that would have been paid to the member, calculated as if the member became inactive on their date of death and retired at their earliest retirement date. For members who die after their earliest retirement date but before normal retirement age, the OSDB is the actuarial equivalent of the service retirement that would have been paid to the member calculated as if they retired on the first day of the month following their death. For members who die after their normal retirement age, the OSDB is the actuarial equivalent of the benefit that would have been paid to the member, calculated as if the member retired on the first day of the month following their date of death.

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 the age of their federally required minimum distribution.

### ***c. 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 for General Service members 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.

### ***d. 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 adjustments (COLA), starting with the monthly benefits received or entitled to be received on August 1. The COLA is capped at 2.0%.

## **2. OPSRP PENSION PROGRAM**

### ***a. 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% 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 retire under the Police and Fire classification, the individual's last 60 months of retirement credit preceding retirement eligibility must be classified as retirement credit for service as a police officer or a firefighter. General Service: 1.5% 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 is limited for all members beginning in 2021. The limit was equal to \$225,533 as of January 1, 2023, and is indexed with inflation every 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, or, if the pension program is terminated, the date on which termination becomes effective.

### ***b. 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% 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 the age of their federally required minimum distribution.

### ***c. 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% of the member's salary determined as of the last full month of employment before the disability occurred.

### **3. INDIVIDUAL ACCOUNT PROGRAM (IAP)**

#### ***a. 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.

Employers have the option to make employer contributions for a member under ORS 238A.340. Contributions for these accounts are deposited into a separate employer-funded account. The member becomes vested in this optional employer-funded account 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 414(k).

Upon retirement, a member of the IAP may receive the amounts in his or her employee account, rollover account, and vested employer-funded 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.

#### ***b. 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.

#### ***c. Recordkeeping***

PERS contracts with Voya Financial to maintain IAP participant records.

### **4. 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 897 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, 2023, PERS employers contributed 0.05% of PERS-covered salaries for Tier One and Tier Two members to fund the normal cost portion of RHIA benefits. No unfunded actuarial liability (UAL) rate was assigned for the RHIA program as it was funded over 100% as of December 31, 2019. 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, 2019, actuarial valuation. This is included in the employer contribution rates listed in Table 3.

TABLE 3

Contribution Rate Summary <sup>1</sup>	Defined Benefit Pension						Postemployment Healthcare		
	PERS Defined Benefit Plan					OPSRP Pension Program		RHIA <sup>5,6</sup>	RHIPA <sup>5,6</sup>
	Pooled Employers			Non-Pooled Employers		All Employers		All Employers	State Agencies
	State Agencies <sup>2</sup>	State and Local Government Rate Pool <sup>3</sup>	School Pool <sup>3</sup>	Political Subdivisions <sup>3,4</sup>	Judiciary	General Service	Police and Fire		
<b>Employee IAP</b>	6.00 %	6.00 %	6.00 %	6.00 %	0.00 %	6.00 %	6.00 %	0.00 %	0.00 %
<b>Employee Normal Cost</b>	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00	0.00
<b>Employer Normal Cost</b>	15.32	15.41	13.45	16.87	19.65	8.64	13.00	0.05	0.11
<b>Unfunded Actuarial Liability</b>	5.04	12.67	14.09	11.77	4.91	1.69	1.69	0.00	0.17
<b>Total Employer Contributions</b>	20.36 %	28.08 %	27.54 %	28.64 %	24.56 %	10.33 %	14.69 %	0.05 %	0.28 %

<sup>1</sup>Group average rates shown are effective July 1, 2021 through June 30, 2023. <sup>5</sup>Normal cost rates are charged on Tier 1 and Tier 2 payroll only.  
<sup>2</sup>A subcomponent of the State and Local Government Rate Pool; includes UAL payment rate offset. <sup>6</sup>UAL rates are charged on all payroll, including OPSRP.  
<sup>3</sup>Does not include UAL payment rate offsets.  
<sup>4</sup>Non-pooled Political Subdivisions are valued separately for the Defined Benefit Plan.

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 health care costs. The number of inactive plan RHIA participants receiving benefits was 40,703 for the fiscal year ended June 30, 2023, and there were 34,508 active and 11,710 inactive members who met the requirements to receive RHIA benefits when they retire.

ORS 238.415 established the Retiree Health Insurance Premium Account (RHIPA). It requires the PERS Board (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 is closed to new entrants hired on or after August 29, 2003.

A non-Medicare eligible surviving spouse or dependent of a deceased, retired state employee is eligible to receive the subsidy if they (1) are receiving a retirement benefit or allowance from PERS or (2) were insured at the time the member died, and the member retired on or after September 29, 1991.

For the fiscal year ended June 30, 2023, state agencies contributed 0.05 and 0.11% 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 0.17% 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, 2019, actuarial valuation. This is included in the employer contribution rates listed in Table 3.

The number of inactive-plan RHIPA participants receiving benefits was 529 for the fiscal year ended June 30, 2023. As of June 30, 2023, there were 9,716 active members who met 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 86, and subsequently remitted to the appropriate PERS health plan.



## 5. 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, 2023, the fair value of investments was \$2,798.7 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 on June 30, 2023, totaled \$13.1 million. Of that amount, \$10.5 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 Corporation to provide financial services. There are 20 investment options (core 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 bear any market risk. OSGP also offers a self-directed brokerage option that permits a participant to establish a brokerage account with Charles Schwab and participate in investment products other than core investment options. 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, 2023, was 31,567.

PERS may assess a charge to the participants not to exceed 2.0% 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, 2023, averaged 0.19% 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.

## 6. 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 PERS Board contracts for medical and hospital insurance on behalf of retired members. Members and their dependents are eligible for PERS health care 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, 2023, there were 50,103 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 contracts with Delta Dental of Oregon under a minimum premium arrangement. Under the minimum premium program, Delta Dental of Oregon agrees to split the rate into an agreed upon fixed claims rate (referred to as maximum premium) and an agreed upon fixed amount to cover non-claims related costs (referred to as the minimum premium). In addition, claims are invoiced on a weekly basis as 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. The current estimate of incurred but not reported (IBNR) for Delta Dental of Oregon insurance claims is \$876,000.

## D. CONTRIBUTIONS

PERS' funding policy provides for periodic member and employer contributions at rates established by the PERS 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.

## 1. 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% 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, in addition to judge employee contributions (ORS 238.515). 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. In 2023, if the member earns more than \$3,570 per month, 0.75% (if OPSRP member) or 2.5% (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.

### *a. 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 OPSRP 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% funded.

### *b. Target-Date Funds*

The Oregon Investment Council, responsible for all PERS fund investments, approved the transition to a target-date fund (TDF) 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 a TDF based on their year of birth. Investments in each fund 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.

Effective January 1, 2021, Senate Bill 1049 (2019) allowed members to elect investment of their IAP account in a TDF other than the default TDF based on their year of birth. PERS now provides members the opportunity to make elections once a year during the month of September, with the change effective the following calendar year.

## 2. 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 fiscal year 2023 were based on the December 31, 2019, actuarial valuation, which became effective July 1, 2021. 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. Effective January 1, 2020, Senate Bill 1049 requires employers to pay contributions on reemployed PERS retirees' salaries as if they were active members, excluding IAP (6%) contributions. Reemployed retirees do not accrue additional benefits while they work after retirement.

**a. PERS Defined Benefit Plan (ORS 238)**

Effective July 1, 2021, the contribution rate for state agencies was 20.36%, the State and Local Government Rate Pool was 28.08%, School Districts Pool was 27.54%, and judiciary was 24.56% of PERS-covered salaries. Political subdivisions that have not joined the State and Local Government Rate Pool had an average pension rate of 28.64%.

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 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 charter 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, 2019, the state agencies, the judiciary, and political subdivisions all had increases in employer contribution rates on July 1, 2021, while schools had a decrease in employer contribution rates. 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.

**b. OPSRP Pension Program (ORS 238A)**

All PERS-participating employers with OPSRP Pension Program members are actuarially pooled and share the same contribution rate. The OPSRP Pension Program employer rates effective July 1, 2021, through June 30, 2023, are 10.33% of covered salaries for General Service employees and 14.69% of covered salaries for Police and Fire employees. These rates increased from 9.85% of covered salaries for General Service and 14.48% of covered salaries for Police and Fire employees for the period July 1, 2019, through June 30, 2021. 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.

**TABLE 4**

<u>Accounts Receivable</u>	<u>June 30, 2023</u>
Broker Receivables	\$ 3,517,499,438
Transition Liability	243,198,241
Interest and Dividends Receivable	284,028,686
Employer and Member Receivables	164,786,789
Member Loans	13,128,058
Other	15,110,242
<b>Total Accounts Receivable</b>	<b>\$ 4,237,751,454</b>

## B. PAYABLES

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

TABLE 5

<u>Accounts Payable</u>	<u>June 30, 2023</u>
Broker Payable	\$ 5,181,186,712
Pension Roll	457,433,888
Investment Fees	22,335,591
Death Benefits	38,342,050
Compensated Absences	3,054,650
Services and Supplies	2,479,083
Other	5,133,727
<b>Total Accounts Payable</b>	<b>\$ 5,709,965,701</b>

## Note 4 - Investments

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

## A. DEPOSITS

PERS cash and cash equivalents consist of cash on hand, deposits in the Oregon Short Term Fund (OSTF), moneys held by external investment managers, cash equivalents held by the health insurance provider, and cash held by the IAP program custodian. OSTF is a cash and investment pool that operates as a demand deposit account. All state funds are required to use OSTF. 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/2023-27.pdf>. OSTF investment risks are addressed in the notes to those financial statements.

The Health Insurance Claims Fund had a balance of \$2.4 million as of June 30, 2023, which was held at U.S. Bank. The account is identified as Public Funds; therefore, any amount in the account above the Federal Deposit Insurance Corporation (FDIC) limit was collateralized by the Public Funds Collateralization Program.

TABLE 6

<u>Depository Account</u>	<u>Bank Balance</u>
Insured	\$ 750,000
Oregon Short Term Fund	1,357,202,980
Health Insurance Claims Fund	2,107,720
IAP On Demand Deposit	5,584,034
Uninsured and Uncollateralized	1,173,119,685
<b>Total Deposits</b>	<b>\$ 2,538,764,419</b>

## **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 in section A, Deposits, the deposit and investment risks, including custodial risk, of the OSTF deposits are outlined in the OSTF financial statements. As of June 30, 2023, the carrying amount of PERS' deposits in OSTF totaled \$1,724.4 million and the corresponding bank balance was \$1,357.5 million. Investment managers' deposits with custodian banks consist of cash and cash equivalents that represent buying reserves. As of June 30, 2023, there was as sum of \$1,173.4 million on deposit for the accounts of the OPERF investment managers.

As of June 30, 2023, the IAP On Demand Deposit Account of \$5.8 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, 2023, the sum of \$151.6 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.

## **3. RESTRICTED CASH EQUIVALENTS**

PERS' cash and cash equivalents as of June 30, 2023, include collateral of \$359.7 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, 2023.

**TABLE 7**

<b>Investments as of June 30, 2023</b>	<b>Fair Value</b>
U.S. Treasury Obligations	\$ 8,254,816,295
U.S. Treasury Obligations - Strips	178,980,526
U.S. Treasury Obligations - TIPS	49,491,441
U.S. Federal Agency Mortgage Securities	1,052,528,812
U.S. Federal Agency Mortgage TBAs	1,152,458,716
U.S. Federal Agency Debt	129,212,317
U.S. Federal Agency Strips	574,858
International Debt Securities	1,107,925,547
Non-U.S. Government Debt Securities	1,188,250,728
Corporate Bonds	1,830,329,917
Bank Loans	1,279,434,469
Municipal Bonds	38,810,930
Collateralized Mortgage Obligations	555,351,144
Commercial Mortgage Backed Securities	89,634,975
Asset-Backed Securities	529,215,498
Guaranteed Investment Contracts <sup>1</sup>	310,740,706
Domestic Fixed Income Funds	965,472,827
Global Fixed Income Funds	881,229,563
Repurchase Agreements	188,000,000
<b>Total Debt Securities</b>	<b>19,782,459,269</b>
Derivatives in Asset Positions	87,004,722
Domestic Equity Securities	10,737,408,507
International Equity Securities	6,215,692,031
Domestic Equity Funds	3,511,250,074
Global Equity Funds	712,375,479
International Equity Funds	840,431,576
Target Date Funds	877,200,620
Oregon Savings Growth Plan - Self Directed	44,770,644
<b>Total Public Equity</b>	<b>23,026,133,653</b>
Real Estate and Real Estate Investment Trusts	13,481,577,315
Private Equity	26,188,039,823
Real Assets	8,980,367,543
Diversifying Strategies	4,918,880,547
Opportunity Portfolio	2,449,303,169
<b>Total PERS Investments - Fiduciary Funds</b>	<b>\$ 98,826,761,319</b>

<sup>1</sup>Guaranteed Investment Contracts are stated at contract value.

**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 and are generally categorized in level 3.

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, real assets, diversifying strategies, 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 these criteria are categorized in level 3.

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

Investments in real estate, other than real estate investment trusts, which are generally valued based on an active market price and are categorized in level 1, have been valued based on the NAV per share (or its equivalent), as provided by the general partner. This type includes 66 commingled real estate funds, structured as limited partnerships, where the funds have a finite term. Distributions from the funds will be received as the underlying investments of the funds are liquidated. Liquidation is expected to take place during the five-year period following the termination of the investment period, which extends to 2037. Investments in real estate also include 16 joint ventures in which 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 16 open-ended funds that permit quarterly redemption of shares, subject to certain requirements being met.

Private equity consists of approximately 212 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.

Real asset and diversifying asset investments seek to provide diversification and inflation-hedging characteristics to the fund. They include investments with a focus on infrastructure and natural resources. Real assets consist of 94 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 real asset infrastructure and natural resource investments, which include 78 of the 94 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 16 funds are open-ended, permitting periodic redemption of shares, subject to certain requirements being met. These 16 funds are invested in diversifying hedge strategies.

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 16 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 seven funds are open-ended, permitting periodic redemption of shares.

PERS has recurring fair value measurements as of June 30, 2023, shown in Table 8. Disclosures regarding redemption and investments valued at the NAV per share (or its equivalent), including Unfunded Commitments, are presented in Table 9.

**TABLE 8**

<b>Investments and Derivative Instruments Measured at Fair Value</b>		<b>Fair Value Measurements Using</b>		
		<b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
<b>Investments by Fair Value Level</b>	<b>6/30/2023</b>			
<b>Debt Securities</b>				
U.S. Treasury Obligations	\$ 8,254,816,295	\$ —	\$ 8,254,816,295	\$ —
U.S. Treasury Obligations - Strips	178,980,526	—	178,980,526	—
U.S. Treasury Obligations - TIPS	49,491,441	—	49,491,441	—
U.S. Federal Agency Mortgage Securities	1,052,528,812	—	1,052,528,812	—
U.S. Federal Agency Mortgage TBAs	1,152,458,716	—	1,152,458,716	—
U.S. Federal Agency Debt	129,212,317	—	129,212,317	—
U.S. Federal Agency Strips	574,858	—	574,858	—
Non-Government Debt Securities	1,188,250,728	—	1,188,250,728	—
Corporate Bonds	2,268,797,528	—	2,207,182,645	61,614,883
Bank Loans	1,374,675,440	—	889,906,245	484,769,195
Municipal Bonds	38,810,930	—	38,810,930	—
Collateralized Mortgage Obligations	691,654,949	—	690,947,105	707,844
Commercial Mortgage Backed Securities	89,634,975	—	89,634,975	—
Asset-Backed Securities	967,128,658	—	917,570,704	49,557,954
Domestic Fixed Income Funds	965,472,827	—	965,472,827	—
Global Fixed Income Funds	881,229,563	—	881,229,563	—
Repurchase Agreements	188,000,000	—	188,000,000	—
Total Debt Securities <sup>1</sup>	19,471,718,563	—	18,875,068,687	596,649,876
<b>Public Equity</b>				
Domestic Equity Securities	10,737,408,507	10,687,141,729	27,208	50,239,570
International Equity Securities	6,215,692,031	6,209,662,575	—	6,029,456
Domestic Equity Funds	3,511,250,074	—	3,511,250,074	—
Global Equity Funds	712,375,479	—	712,375,479	—
International Equity Funds	840,431,576	684,787,095	155,584,994	59,487
Target Date Fund	877,200,620	—	877,200,620	—
Oregon Savings Growth Plan - Self Directed	44,770,644	44,770,644	—	—
Total Public Equity	22,939,128,931	17,626,362,043	5,256,438,375	56,328,513
Real Estate Investment Trusts	522,529,505	522,529,505	—	—
<b>Total Investments by Fair Value Level</b>	<b>\$ 42,933,376,999</b>	<b>\$ 18,148,891,548</b>	<b>\$ 24,131,507,062</b>	<b>\$ 652,978,389</b>

TABLE 8 continues on the next page



TABLE 8 continuing from the previous page

		<u>6/30/2023</u>						
<b>Investments Measured at the Net Asset Value (NAV)</b>				<b>Fair Value Measurements Using</b>				
				<b>Quoted Prices in</b>	<b>Significant Other</b>		<b>Significant</b>	
				<b>Active Markets for</b>	<b>Observable Inputs</b>		<b>Unobservable</b>	
				<b>Identical Assets</b>	<b>(Level 2)</b>		<b>Inputs</b>	
				<b>(Level 1)</b>	<b>(Level 3)</b>		<b>(Level 3)</b>	
		<u>6/30/2023</u>						
<b>Investments Measured at the Net Asset Value (NAV)</b>								
Real Estate								
Real Estate Investments	\$	9,696,355,905						
Real Estate Open-Ended Funds		3,262,691,905						
Total Real Estate		12,959,047,810						
Private Equity		26,188,039,823						
Real Assets		8,980,367,543						
Diversifying Strategies		4,918,880,547						
Opportunity Portfolio								
Opportunity Private Investments		1,262,012,265						
Opportunity Open-Ended Funds		1,187,290,904						
Total Opportunity Portfolio		2,449,303,169						
Total Investments Measured at the NAV		55,495,638,892						
Total Investments Measured at Fair Value	\$	<b>98,429,015,891</b>						
<b>Investments Derivative Instruments</b>								
Credit Default Swaps	\$	826,687	\$	—	\$	826,687	\$	—
Foreign Exchange Forwards		(10,500,730)		—		(10,500,730)		—
Interest Rate Swaps		75,316,687		—		75,316,687		—
Options		10,553,180		—		10,553,180		—
Rights and Warrants		308,168		233,257		74,911		—
Total Assets		76,503,992		233,257		76,270,735		—
Credit Default Swaps		(612,947)		—		(612,947)		—
Foreign Exchange Forwards		127,781,898		—		127,781,898		—
Interest Rate Swaps		(74,108,045)		—		(74,108,045)		—
Options		(1,210,995)		—		(1,210,995)		—
Total Liabilities		51,849,911		—		51,849,911		—
<b>Total Investments Derivative Instruments</b>	<b>\$</b>	<b>128,353,903</b>	<b>\$</b>	<b>233,257</b>	<b>\$</b>	<b>128,120,646</b>	<b>\$</b>	<b>—</b>
<b>Invested Securities Lending Collateral</b>								
Asset-Backed Securities	\$	43,911,817	\$	—	\$	43,911,817	\$	—
Negotiable Certificates of Deposit		128,223,910		—		128,223,910		—
Commercial Paper		21,461,357		—		21,461,357		—
Corporate Bonds		51,200,032		—		51,200,032		—
U.S. Agency Securities		13,200,000		—		13,200,000		—
Repurchase Agreements		351,292,000		—		351,292,000		—
<b>Total Invested Securities Lending Collateral<sup>2</sup></b>	<b>\$</b>	<b>609,289,116</b>	<b>\$</b>	<b>—</b>	<b>\$</b>	<b>609,289,116</b>	<b>\$</b>	<b>—</b>

<sup>1</sup>Guaranteed Investment Contracts are excluded from the table as these are stated at contract value.

<sup>2</sup>For OSTF's participation in securities lending activity of \$315,118, refer to their audited financial statements at: <https://sos.oregon.gov/audits/Documents/2023-27.pdf>

**TABLE 9**

**Investments Measured at the Net Asset Value**

	Fair Value	Unfunded Commitments*	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
<b>Real Estate</b>				
Real Estate Investments	\$ 9,696,355,905	\$ 3,602,065,083	n/a	n/a
Real Estate Open-Ended Funds	3,262,691,905	187,209,491	Quarterly	15 - 90 days
<b>Private Equity</b>	26,188,039,823	6,660,950,911	n/a	n/a
<b>Real Assets</b>	8,980,367,543	3,341,982,261	n/a	n/a
<b>Diversifying Strategies</b>	4,918,880,547	-	Monthly	3 - 90 days
<b>Opportunity Portfolio</b>				
Opportunity Private Investments	1,262,012,265	656,501,949	n/a	n/a
Opportunity Open-Ended Funds	1,187,290,904	493,613,160	Monthly, Quarterly	5 - 90 days
<b>Total</b>	<b>\$ 55,495,638,892</b>	<b>\$ 14,942,322,855</b>		

\* Excludes unfunded commitments associated with investments included in the fair value hierarchy (Levels 1, 2, and 3) and new commitments not yet funded at 6/30/2023.

**2. RATE OF RETURN**

For the fiscal year ended June 30, 2023, the annual money-weighted rate of return on defined benefit pension plan investments, net of defined benefit pension plan investment expenses, was 2.97%. The annual money-weighted rates of return on the other postemployment healthcare benefits (OPEB) investments, net of OPEB investment expenses, were 3.08% for the Retirement Health Insurance Account (RHIA) and 3.73% 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, 2023, there were no organizations that represent 5% 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, 2023, the fair value of below-grade investments, excluding unrated securities, is \$1,743.1 million, or 16.0%, of total securities subject to credit risk and 8.81% of total debt securities. The weighted quality rating average is AA-. Unrated securities include \$577.3 million in bank loans, \$1,457.0 million in domestic and global fixed-income funds, \$310.7 million in guaranteed investment contracts, and \$838.9 million in other debt securities. Unrated federal agency securities include \$266.3 million in Federal Home Loan Mortgage Corporation (FHLMC), \$1,356.3 million in Federal National Mortgage Association (FNMA), and \$209.2 million in other federal agency securities. These federal agency securities are not rated by the credit rating agencies because these are implicitly guaranteed by the U.S. government. Table 10 details the quality ratings for credit risk debt securities as of June 30, 2023.

**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, 2023, investment securities (excluding cash, cash equivalents, and repurchase agreements held as securities lending collateral) are registered and held in the name of the OIC for the benefit of PERS and are not exposed to custodial credit risk.

TABLE 10

<b>Schedule of Credit Risk at June 30, 2023</b>	
<b>Quality Rating</b>	<b>Fair Value</b>
AAA	\$ 1,222,054,583
AA	471,619,445
A	969,411,310
BBB	1,473,216,345
BB	511,165,518
B	889,118,609
CCC	276,935,303
CC	56,489,789
C	624,386
D	8,760,576
Not Rated	3,183,868,614
Not Rated - U.S. Agency <sup>1</sup>	1,831,758,375
<b>Total Subject to Credit Risk</b>	<b>10,895,022,853</b>
U.S. Government Guaranteed Securities	8,887,436,416
<b>Total Debt Securities</b>	<b>\$ 19,782,459,269</b>

<sup>1</sup> 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

<b>Schedule of Interest Rate Risk - Effective Duration at June 30, 2023</b>		
<b>Investments</b>	<b>Fair Value</b>	<b>Effective Weighted Duration Rate (in years)</b>
U.S. Treasury Obligations	\$ 8,254,816,295	4.30
U.S. Treasury Obligations - Strips	178,980,526	0.76
U.S. Treasury Obligations - TIPS	49,491,441	3.93
U.S. Federal Agency Mortgage Securities	1,052,528,812	6.16
U.S. Federal Agency Mortgage TBAs	1,152,458,716	4.66
U.S. Federal Agency Debt	129,212,317	3.53
U.S. Federal Agency Strips	574,858	22.48
International Debt Securities	1,107,613,045	7.86
Non-U.S. Government Debt Securities	1,188,250,728	4.29
Corporate Bonds	1,829,352,729	6.31
Bank Loans	1,263,164,526	7.36
Municipal Bonds	38,810,930	5.05
Collateralized Mortgage Obligations	555,046,331	7.35
Commercial Mortgage Backed Securities	89,634,975	9.56
Asset-Backed Securities	529,215,498	6.31
Domestic Fixed Income Funds	965,472,827	5.23
Global Fixed Income Funds	881,229,563	6.28
Repurchase Agreements	188,000,000	0.00 <sup>1</sup>
No Effective Duration:		
International Debt Securities	312,502	N/A
Corporate Bonds	977,188	N/A
Bank Loans	16,269,943	N/A
Collateralized Mortgage Obligations	304,813	N/A
Guaranteed Investment Contracts	310,740,706	N/A
<b>Total Debt Securities</b>	<b>19,782,459,269</b>	
Cash Equivalent - Mutual Funds - STIF	720,277,489	25 days <sup>2</sup>
Cash Equivalent - Oregon Short Term Fund	962,177,547	152 days <sup>2</sup>
<b>Total Subject to Interest Rate Risk</b>	<b>\$ 21,464,914,305</b>	

<sup>1</sup>0.002 year  
<sup>2</sup>Weighted average maturity. Pools are not rated.

## 6. INTEREST RATE RISK

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. This risk is managed within the portfolio using the effective duration methodology. As of June 30, 2023, the weighted average duration of PERS' fixed-income portfolio was 5.24 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, 2023. Table 11 shows the investments by type, amount, and effective weighted duration.

On June 30, 2023, PERS held approximately \$1,697.5 million in debt instruments backed by pooled mortgages, collateralized mortgage obligations, commercial mortgage-backed securities, 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 \$1,152.5 million in To-Be-Announced (TBA) federal agency-issued mortgage pools. An additional \$529.2 million of debt instruments held are asset-backed securities backed primarily by automobiles, consumer credit receivables, student loan receivables, and heavy equipment leases.

## 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, 2023, approximately 5.44% 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.

TABLE 12

<b>Currency Exposures by Asset Class in U.S. Dollar Equivalents as of June 30, 2023</b>							
<b>Currency</b>	<b>Cash and Cash Equivalents</b>	<b>Debt Securities</b>	<b>Public Equity</b>	<b>Derivatives in Asset Positions</b>	<b>Real Estate</b>	<b>Real Assets and Diversifying Strategies</b>	<b>Total</b>
Argentine peso	\$ 1,297	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,297
Australian dollar	2,055,597	29,644,063	222,572,674	111,024	5,560,438	47,694,874	307,638,670
Brazilian real	435,811	-	90,214,928	419,563	-	-	91,070,302
Canadian dollar	5,425,628	35,741,542	346,419,037	-	145,367	-	387,731,574
Chilean peso	18,820	-	818,785	4,265,392	-	-	5,102,997
Chinese yuan renminbi	90,331,664	80,530,208	132,584,803	1,343,006	-	-	304,789,681
Colombian peso	11,962	-	-	-	-	-	11,962
Czech koruna	29,696	1,566,469	-	-	-	-	1,596,165
Danish krone	168,715	2,043,348	158,600,866	-	-	-	160,812,929
Egyptian pound	35,395	-	2,953,004	-	-	-	2,988,399
Euro	16,594,247	356,713,606	1,406,786,877	108,159	1,634,050	3,176,860,314	4,958,697,253
Hong Kong dollar	1,541,780	-	338,548,393	-	431,303	-	340,521,476
Hungarian forint	619,352	4,131,297	2,073,599	-	-	-	6,824,248
Indian rupee	16,932	-	128,552,306	-	-	-	128,569,238
Indonesian rupiah	981,115	19,545,260	46,519,308	-	-	-	67,045,683
Israeli shekel	84,695	3,563,519	8,641,473	-	-	-	12,289,687
Japanese yen	6,529,543	335,499,322	939,053,082	7,979,032	708,159	-	1,289,769,138
Kuwaiti dinar	19,674	-	428,188	-	-	-	447,862
Malaysian ringgit	239,625	11,657,237	3,887,752	423,086	-	-	16,207,700
Mexican peso	2,662,623	50,182,689	21,421,040	99,535	10,277,972	-	84,643,859
New Taiwan dollar	1,101,351	-	199,987,314	-	-	-	201,088,665
New Zealand dollar	531,509	14,422,512	2,704,981	-	-	-	17,659,002
Nigerian naira	2,439,368	-	-	-	-	-	2,439,368
Norwegian krone	118,457	329,458	34,963,516	-	-	-	35,411,431
Pakistani rupee	49,542	-	1,827,884	-	-	-	1,877,426
Peruvian nuevo sol	37,388	4,090,671	-	-	-	-	4,128,059
Philippine peso	23,620	-	5,607,888	-	-	-	5,631,508
Polish zloty	24,985	-	11,017,781	275,183	-	-	11,317,949
Pound sterling	12,747,546	108,416,083	933,649,072	-	275,110	49,474,203	1,104,562,014
Qatari riyal	50,304	-	4,049,333	-	-	-	4,099,637
Romanian leu	-	765,309	-	-	-	-	765,309
Russian ruble	906,511	3,298,568	34,444,053	-	-	-	38,649,132
Saudi Arabian riyal	1,651,693	-	49,981,399	-	84,863	-	51,717,955
Singapore dollar	478,521	2,702,523	55,582,512	1,056	15,408,615	-	74,173,227
South African rand	99,859	6,999,444	36,872,446	29,449	-	-	44,001,198
South Korean won	2,033,297	-	243,904,652	59,017,099	-	-	304,955,048
Swedish krona	168,477	-	108,091,164	-	-	-	108,259,641
Swiss franc	807,641	-	342,210,701	-	-	-	343,018,342
Thailand baht	484,598	3,760,598	28,112,461	-	-	-	32,357,657
Turkish lira	14,458	-	35,225,668	-	-	-	35,240,126
United Arab Emirates dirham	7,456	-	10,950,726	-	-	-	10,958,182
Vietnamese dong	-	-	1,338,645	-	-	-	1,338,645
<b>Total Subject to Foreign Currency Risk</b>	<b>\$ 151,580,752</b>	<b>\$ 1,075,603,726</b>	<b>\$ 5,990,598,311</b>	<b>\$ 74,071,584</b>	<b>\$ 34,525,877</b>	<b>\$ 3,274,029,391</b>	<b>\$ 10,600,409,641</b>

## 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, 2023, the OPERF had \$4,201.8 million in commitments to purchase real estate investments and \$9,627.3 million in commitments to purchase private equity investments, which include \$6,689.2 million in callable distributions. There were \$4,953.0 million in commitments to purchase real assets, which includes \$1,287.8 million in callable distributions. Additionally, there were \$1,300.1 million in commitments to purchase opportunity portfolio investments, which include \$692.1 million in callable distributions. These amounts are unfunded and are not recorded in the Statement of Fiduciary Net Position.

## C. SECURITIES LENDING

In accordance with state investment policies, OPERF participates in securities lending transactions. Through securities lending authorization agreements, the Oregon State Treasury has authorized its custodian, State Street Bank, to lend its securities pursuant to the terms and conditions of policy and applicable agreements. Both OPERF and the borrowers maintain the right to terminate all securities lending transactions on demand. During the period of these financial statements, 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 or not less than 102% of the

fair value of loaned U.S. securities and international fixed-income securities, or 105% 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 fiscal 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 on June 30, 2023, is effectively one day. On June 30, 2023, OPERF had no credit risk exposure to borrowers because the amounts OPERF owes borrowers exceeds the amounts borrowers owe OPERF.

On June 30, 2023, the fair value of cash collateral received and invested cash collateral were each \$607.6 million. The cumulative unrealized gain in invested cash collateral of \$18,836 has been recognized in 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, 2023, total income from securities lending activity was \$22.0 million, and total expenses for the period were \$19.0 million for a net gain of \$3.0 million.

Oregon Short Term Fund (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, 2023, OPERF's allocated portion of cash collateral received and invested cash collateral were each \$315,118.

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: <https://sos.oregon.gov/audits/Documents/2023-27.pdf>.

Table 13 shows the combined balances of the securities on loan, cash and securities collateral received, and investments of cash collateral held. Tables 14 and 15 disclose how the cash collateral received was invested. Securities lending collateral subject to credit risk as of June 30, 2023, is shown in Table 14. Securities lending collateral subject to interest rate risk as of June 30, 2023, is shown in Table 15.

**TABLE 13**

<b>Securities Lending as of June 30, 2023</b>			
<b>Investment Type</b>	<b>Securities on Loan at Fair Value</b>	<b>Cash and Securities Collateral Received</b>	<b>Investments of Cash Collateral at Fair Value</b>
U.S. Treasury Securities	\$ 181,907,298	\$ 185,369,553	\$ –
U.S. Agency Securities	84,656,159	86,343,400	12,794,834
Domestic Equity Securities	485,619,475	493,590,463	465,428,853
Domestic Debt Securities	125,061,133	127,571,933	114,494,065
International Equity Securities	22,874,412	24,336,756	14,928,333
Allocation from Oregon Short Term Fund	4,331,825	4,419,789	315,118
<b>Total</b>	<b>\$ 904,450,302</b>	<b>\$ 921,631,894</b>	<b>\$ 607,961,203</b>

TABLE 14

<b>Securities Lending Invested Cash Collateral Subject to Credit Risk as of June 30, 2023</b>	
<b>Quality Rating</b>	<b>Fair Value</b>
AAA	\$ 57,111,817
AA <sup>1</sup>	148,225,445
A	164,659,854
<b>Total Subject to Credit Risk</b>	<b>369,997,116</b>
U.S. Government Guaranteed Repurchase Agreements	239,292,000
Allocation from Oregon Short Term Fund	315,118
Payable	(1,643,031)
<b>Total Securities Lending Invested Cash Collateral</b>	<b>\$ 607,961,203</b>

<sup>1</sup> Commercial paper ratings of A+/A-1+/A-1 categorized as AA.

TABLE 15

<b>Securities Lending Invested Cash Collateral Subject to Interest Rate Risk as of June 30, 2023</b>		
<b>Security Type</b>	<b>Fair Value</b>	<b>Effective Weighted Duration Rate (in days)<sup>1</sup></b>
Asset-Backed Securities	\$ 43,911,817	29
Negotiable Certificates of Deposit	128,223,910	84
Corporate Bonds	21,461,357	5
Commercial Paper	51,200,032	93
U.S. Agency Securities	13,200,000	4
Repurchase Agreements	112,000,000	2
<b>Total Subject to Interest Rate Risk</b>	<b>369,997,116</b>	<b>29</b>
U.S. Government Guaranteed Repurchase Agreements	239,292,000	
Allocation from Oregon Short Term Fund	315,118	
Payable	(1,643,031)	
<b>Total Securities Lending Invested Cash Collateral</b>	<b>\$ 607,961,203</b>	

<sup>1</sup> Weighted average days to maturity or next reset date.

## D. DERIVATIVE INSTRUMENTS

Oregon Investment Council policy allows, with some restrictions, for the use of derivative instruments in the prudent management of OPERF investments. Certain internally and externally managed accounts are allowed, through contract and policy, to invest in derivative instruments to carry out their investment management activities.

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

All derivative instruments held by OPERF are considered investments. The fair value of OPERF derivative investments is reported in the Investment Sales and Other Receivables, Investment Purchases and Accrued Expenses, and the Public Equity lines of the Statement of Fiduciary Net Position – Pension and Other Postemployment Plans on pages 40 and 41. 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 42 and 43.

Table 16 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, 2023.

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 because 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. This 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. 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, to purchase securities from the issuing entity at a specific price and within a certain 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.



TABLE 16

**Derivative Instruments as of June 30, 2023**

<b>Investment Derivatives</b>	<b>Net Appreciation/ (Depreciation) in Fair Value of Investments <sup>1,3</sup></b>	<b>Classification</b>	<b>Fair Value</b>	<b>Notional Value <sup>2</sup></b>
Commodity Futures Long	\$ 231,167	Public Equity	\$ –	\$ –
Commodity Futures Short	(1,744,848)	Public Equity	–	–
Credit Default Swaps Bought	(3,463,878)	Public Equity	(612,947)	47,980,000
Credit Default Swaps Written	7,469,364	Public Equity	826,687	55,319,000
Fixed Income Futures Long	(337,621,741)	Public Equity	–	4,952,869,298
Fixed Income Futures Short	31,514,282	Public Equity	–	(427,948,589)
Fixed Income Options Bought	(1,366,800)	Public Equity	10,433,616	228,130,144
Fixed Income Options Written	2,867,904	Public Equity	(965,685)	(75,324,699)
Foreign Currency Options Bought	792	Public Equity	20,462	5,686,934
Foreign Currency Options Written	2,307	Public Equity	(130,966)	(3,367,934)
Foreign Exchange Forwards	62,150,050	Receivables/Payables	117,281,168	13,710,720,876
Futures Options Bought	(822,844)	Public Equity	99,102	246,000
Futures Options Written	2,096,256	Public Equity	(114,344)	(183,000)
Index Futures Long	16,739,954	Public Equity	–	23,700
Index Futures Short	(206,821,949)	Public Equity	–	(12,839,265)
Pay Fixed Interest Rate Swaps	144,892,967	Public Equity	49,574,516	3,540,719,633
Receive Fixed Interest Rate Swaps	(124,932,898)	Public Equity	(48,365,874)	2,868,309,845
Rights	49,545	Public Equity	28,324	349,141
Total Return Swaps Bond	877,475	Public Equity	–	–
Total Return Swaps Equity	(2,109,239)	Public Equity	–	–
Warrants	22,548	Public Equity	279,844	47,453
<b>Total</b>	<b>\$ (409,969,586)</b>		<b>\$ 128,353,903</b>	<b>\$ 24,890,738,537</b>

<sup>1</sup> Negative values (in brackets) refer to losses.

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

<sup>3</sup> Excludes futures margin payments.

## 1. COUNTERPARTY CREDIT RISK

Table 17 presents a summary of counterparty credit ratings relating to derivative instruments in asset positions as of June 30, 2023.

**TABLE 17**

<b>Derivative Instruments Subject to Counterparty Credit Risk as of June 30, 2023</b>					
<b>Counterparty Name</b>	<b>Percentage of Net Exposure</b>	<b>S&amp;P Rating</b>	<b>Fitch Rating</b>	<b>Moody's Rating</b>	
JP Morgan Chase Bank N.A.	10.03%	A+	AA	Aa2	
HSBC Bank USA	9.67%	A+	AA-	Aa3	
Royal Bank of Canada (U.K)	8.25%	AA-	AA-	A1	
UBS AG	6.45%	A+	A+	Aa3	
Goldman Sachs Bank USA	5.98%	BBB+	A	A2	
Barclays Bank LCH	5.93%	A+	A+	A1	
Citibank N.A.	5.65%	A+	A+	Aa3	
Morgan Stanley Capital Services Inc.	5.20%	A-	A+	A1	
Australia and New Zealand Banking Group	4.94%	AA-	A+	Aa3	
State Street Bank London	3.55%	A	AA-	A1	
Standard Chartered Bank	3.47%	A+	A+	A1	
Société Générale	3.35%	A	A-	A1	
BNP Paribas SA	3.22%	A+	A+	Aa3	
Morgan Stanley and Co. International PLC	3.18%	A-	A+	A1	
Morgan Stanley LCH	2.67%	A-	A+	A1	
HSBC Bank PLC	2.54%	A-	A+	A3	
Toronto Dominion Bank	2.23%	AA-	AA-	A1	
Morgan Stanley CME	1.92%	A-	A+	A1	
Westpac Banking Corporation	1.84%	AA-	A+	Aa3	
Credit Agricole CIB	1.71%	A+	A+	Aa3	
Bank of New York	1.64%	A	AA-	A1	
NatWest Markets PLC	1.54%	A	A+	A1	
State Street Bank and Trust Company	1.39%	AA-	AA	Aa3	
JP Morgan Chase Bank N.A. London	1.24%	A+	AA	Aa2	
Barclays Bank PLC Wholesale	0.92%	A+	A+	A1	
Royal Bank of Canada	0.38%	AA-	AA-	A1	
Bank of America, N.A.	0.31%	A+	AA	Aa1	
The Bank of New York Mellon	0.25%	AA-	AA	Aa2	
Morgan Stanley ICE	0.23%	A-	A+	A1	
Canadian Imperial Bank of Commerce	0.12%	A+	AA-	Aa2	
Goldman Sachs International	0.10%	A+	A+	A1	
JP Morgan LCH	0.05%	A-	AA-	A1	
JP Morgan CME	0.03%	A-	AA-	A1	
Banco Santander Central Hispano	0.01%	A+	A-	A2	
Deutsche Bank AG	0.01%	A-	A-	A1	
	100.00%				

## 2. INTEREST RATE RISK

As of June 30, 2023, OPERF is exposed to interest rate risk on its various swap arrangements and options. Table 18 presents a segmented time schedule of those instruments. Table 19 shows a schedule of derivative instruments that were highly sensitive to interest rate changes.

**TABLE 18**

<b>Derivative Instruments Subject to Interest Rate Risk as of June 30, 2023</b>					
<b>Investment Type</b>	<b>Fair Value</b>	<b>Investment Maturities (in years)</b>			
		<b>Less Than 1</b>	<b>1 - 5</b>	<b>6 - 10</b>	<b>More Than 10</b>
Credit Default Swaps Bought	\$ (612,947)	\$ –	\$ (612,555)	\$ –	\$ (392)
Credit Default Swaps Written	826,687	–	826,687	–	–
Fixed Income Options Bought	10,433,616	216,659	10,216,957	–	–
Fixed Income Options Written	(965,685)	(817,620)	(148,065)	–	–
Pay Fixed Interest Rate Swaps	49,574,516	3,319,959	33,622,172	5,553,793	7,078,592
Receive Fixed Interest Rate Swaps	(48,365,874)	(3,617,026)	(25,810,423)	(8,181,279)	(10,757,146)
<b>Total</b>	<b>\$ 10,890,313</b>	<b>\$ (898,028)</b>	<b>\$ 18,094,773</b>	<b>\$ (2,627,486)</b>	<b>\$ (3,678,946)</b>

TABLE 19

**Derivative Instruments Highly Sensitive to Interest Rate Changes as of June 30, 2023**

Investment Type	Reference Rate	Fair Value	Notional Value
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month US CPI, Pay Fixed 2.32950	\$ 53,078	\$ 500,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month US CPI, Pay Fixed 2.27400	1,045,731	9,300,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month US CPI, Pay Fixed 2.34500	125,550	1,200,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-month AUD BBSW, Pay Fixed 1.75000	649,764	3,727,640
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 1.52000	4,081,996	14,048,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 0.00000	-	11,564,604
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month JPY TONAR, Pay Fixed 0.44650	99,637	622,687
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.06000	-	22,762,653
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.07700	-	2,213,997
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.32000	97,907	5,100,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.43000	2,898	100,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.85000	2,947,877	104,500,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 1.75000	216,380	800,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.70000	-	691,874
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.25000	-	1,937,247
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.50000	-	3,251,807
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 2.50000	209,782	1,624,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.45000	-	2,421,559
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 2.60000	765,921	13,741,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month ZAR JIBAR, Pay Fixed 7.49000	70,948	1,864,620
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.96478	957,173	23,600,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month CAD CDOR, Pay Fixed 3.25000	414,523	10,504,440
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.40000	11,092,310	500,000,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month KRW KSDA, Pay Fixed 3.63900	(1,814)	455,356
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.27000	170,199	6,112,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month PLN WIBOR, Pay Fixed 5.48740	(5,293)	353,167
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month PLN WIBOR, Pay Fixed 6.54670	(41,593)	774,560
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.27000	585,784	21,036,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.06000	-	484,312
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month CAD CDOR, Pay Fixed 3.25000	439,897	11,464,198
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month CAD CDOR, Pay Fixed 3.25000	206,229	4,685,434
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month ZAR JIBAR, Pay Fixed 8.86000	(3,467)	382,135
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.63050	(49,754)	13,665,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.06050	54,072	2,081,500
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.05750	55,227	2,081,500
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.64000	(59,817)	13,665,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 4.32100	10,350	921,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.05000	1,356,982	32,293,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 4.18750	424,081	32,988,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.80000	3,579,083	442,463,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 4.20000	1,905,924	143,703,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.82600	162,139	19,633,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.85000	(30,810)	9,829,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.71450	(38,742)	3,750,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.68450	(49,042)	6,127,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.37200	(123,299)	3,859,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 4.48450	127,791	13,718,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 4.43750	215,531	21,737,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.53900	(188,278)	2,987,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 4.73000	122,534	20,136,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.47550	104,686	12,823,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.49800	570,655	62,345,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.39100	460,376	31,132,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.39900	84,507	5,969,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.42950	155,068	13,191,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month MXN TIE, Pay Fixed 8.47500	(697)	199,032
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.28900	542,049	23,751,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.31050	227,822	10,784,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.21500	284,191	9,912,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.44050	164,801	7,263,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.93500	344,762	6,969,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.35500	142,570	8,099,000

**TABLE 19** continuing from the previous page

<b>Investment Type</b>	<b>Reference Rate</b>	<b>Fair Value</b>	<b>Notional Value</b>
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month SOFR, Pay Fixed 3.15000	246,503	10,032,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.37150	140,276	8,610,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.70000	5,759,076	518,135,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.66550	594,823	84,062,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.14500	500,922	37,352,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.88400	116,102	19,172,500
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.16400	478,373	36,323,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.44650	209,283	21,237,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.07600	(31,546)	14,478,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.86500	71,747	11,056,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.02700	170	12,239,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.90250	26,394	5,530,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.64000	150,739	10,168,847
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.38450	148,061	9,676,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.50400	48,930	7,963,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.33100	(141,123)	5,984,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.33950	(118,928)	4,690,500
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.94200	738,705	15,299,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.33900	(118,493)	4,690,500
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.52400	96,487	21,013,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.80800	(94,831)	5,351,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.47250	63,882	7,436,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.82600	111,225	22,536,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 3.00000	(122,040)	11,019,103
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.00000	136,734	2,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.09784	19,583	520,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.88000	115,726	1,960,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.10623	7,400	200,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.97000	285,680	6,765,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.06966	47,845	1,200,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.38000	187	15,622
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month COP CPIBR, Pay Fixed 9.09770	(21,215)	387,442
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 2.75000	326,313	3,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.75000	(4,454)	1,096,947
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.25000	(30,711)	2,695,000
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 2.50000	29,748	11,346,403
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month Euro EURIBOR, Pay Fixed 3.50000	145,216	25,311,208
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month CAD CORRA, Pay Fixed 3.25000	(5,247)	680,144
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.23400	6,559	242,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.5000	11,204	1,651,419
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month JPY TONAR, Pay Fixed 0.20000	(152,893)	70,294,392
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.15859	321,384	24,400,000
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month US CPI, Pay Fixed 2.50000	8,714	1,700,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.04500	18,705	441,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.50000	46,461	6,848,206
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month BRL BRCDI, Pay Fixed 12.64000	(45,210)	828,758
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month SOFR, Pay Fixed 0.75000	2,842,775	13,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month SOFR, Pay Fixed 1.25000	1,222,762	12,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month LIBOR, Pay Fixed 0.75000	143,735	13,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month LIBOR, Pay Fixed 1.25000	116,478	12,900,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.75000	19,698	1,731,119
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.75000	6,226	547,188
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.25300	236,262	9,281,000
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month MYR KLIBOR, Pay Fixed 3.54500	6,868	1,274,344
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month CZK PRIBOR, Pay Fixed 5.91857	(1,615)	498,055
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month PLN WIBOR, Pay Fixed 6.02100	(4,681)	931,700
Pay Fixed Interest Rate Swaps	Receive Variable 6-Month NOK NIBOR, Pay Fixed 3.03300	2,596,581	52,347,728
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month COP CPIBR, Pay Fixed 8.76620	(27,394)	588,621
Pay Fixed Interest Rate Swaps	Receive Variable 3-Month SOFR, Pay Fixed 5.06260	11,065	3,000,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month BRL BRCDI, Pay Fixed 11.12000	(14,929)	637,447
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.75000	(5,563)	2,000,000
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month CLP CLICP, Pay Fixed 4.78500	3,933	433,198

**TABLE 19** continuing from the previous page

<b>Investment Type</b>	<b>Reference Rate</b>	<b>Fair Value</b>	<b>Notional Value</b>
Pay Fixed Interest Rate Swaps	Receive Variable 0-Month CLP CLICP, Pay Fixed 4.86000	920	291,541
Pay Fixed Interest Rate Swaps	Receive Variable 1-Month MXN TIIE, Pay Fixed 9.13600	3,558	1,392,379
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.76100	68,461	9,793,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.80650	46,051	9,295,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.00000	(2,775,269)	333,182,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.40000	453,684	111,154,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.60000	(361,695)	45,728,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.74950	107,704	14,383,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 4.77200	14,039	23,425,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.91700	(3,250)	19,640,000
Pay Fixed Interest Rate Swaps	Receive Variable 12-Month SOFR, Pay Fixed 3.92550	(10,533)	16,231,000
<b>Subtotal - Pay Fixed Interest Rate Swaps</b>		<b>49,574,516</b>	<b>3,540,719,633</b>
Receive Fixed Interest Rate Swaps	Receive Fixed 7.45000, Pay Variable 1-Month MXN TIIE	(561,936)	15,725,489
Receive Fixed Interest Rate Swaps	Receive Fixed 7.44000, Pay Variable 1-Month MXN TIIE	(592,900)	16,370,951
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00000, Pay Variable 3-Month CAD CDOR	(780,868)	7,708,294
Receive Fixed Interest Rate Swaps	Receive Fixed 1.25000, Pay Variable 3-Month CAD CDOR	(26,789)	151,143
Receive Fixed Interest Rate Swaps	Receive Fixed 0.25000, Pay Variable 6-Month Euro EURIBOR	(3,410,134)	11,564,604
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000, Pay Variable 6-Month Euro EURIBOR	(528,534)	1,091,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000, Pay Variable 6-Month Euro EURIBOR	(2,393,194)	7,200,602
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000, Pay Variable 12-Month JPY TONAR	(111,108)	22,762,653
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000, Pay Variable 12-Month JPY TONAR	(114,523)	3,251,807
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000, Pay Variable 12-Month JPY TONAR	(30,810)	2,213,997
Receive Fixed Interest Rate Swaps	Receive Fixed 0.45000, Pay Variable 12-Month JPY TONAR	(364,240)	2,421,559
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000, Pay Variable 6-Month JPY TONAR	(23,068)	4,427,993
Receive Fixed Interest Rate Swaps	Receive Fixed 0.00000, Pay Variable 6-Month JPY TONAR	(198,242)	5,396,617
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000, Pay Variable 12-Month SOFR	(535,207)	11,300,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00000, Pay Variable 12-Month SOFR	(970,353)	6,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.34250, Pay Variable 12-Month CHF SARON	(326,447)	5,700,553
Receive Fixed Interest Rate Swaps	Receive Fixed 0.25000, Pay Variable 12-Month JPY TONAR	(39,517)	1,937,247
Receive Fixed Interest Rate Swaps	Receive Fixed 0.70000, Pay Variable 12-Month JPY TONAR	(58,392)	691,874
Receive Fixed Interest Rate Swaps	Receive Fixed 1.69500, Pay Variable 12-Month SOFR	(493,940)	3,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.75000, Pay Variable 12-Month SOFR	(2,301,761)	68,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.80000, Pay Variable 12-Month JPY TONAR	(30,954)	484,312
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00000, Pay Variable 6-Month Euro EURIBOR	(83,923)	4,036,701
Receive Fixed Interest Rate Swaps	Receive Fixed 3.75000, Pay Variable 3-Month NZD NZDDB	(224,462)	5,697,646
Receive Fixed Interest Rate Swaps	Receive Fixed 2.77000, Pay Variable 0-Month SOFR	(1,012,075)	33,131,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.00000, Pay Variable 3-Month NZD NZDDB	(137,355)	8,209,512
Receive Fixed Interest Rate Swaps	Receive Fixed 2.96815, Pay Variable 12-Month SOFR	(230,662)	10,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.25000, Pay Variable 6-Month Euro EURIBOR	(333,470)	4,102,161
Receive Fixed Interest Rate Swaps	Receive Fixed 2.25000, Pay Variable 6-Month Euro EURIBOR	(88,573)	1,036,450
Receive Fixed Interest Rate Swaps	Receive Fixed 4.97000, Pay Variable 6-Month PLN WIBOR	(1,443)	296,336
Receive Fixed Interest Rate Swaps	Receive Fixed 2.78100, Pay Variable 12-Month SOFR	(2,666,338)	55,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.50000, Pay Variable 6-month AUD BBSW	73,903	29,222,035
Receive Fixed Interest Rate Swaps	Receive Fixed 7.99500, Pay Variable 3-Month ZAR JIBAR	(17,329)	851,929
Receive Fixed Interest Rate Swaps	Receive Fixed 4.25000, Pay Variable 6-month AUD BBSW	(9,032)	1,331,300
Receive Fixed Interest Rate Swaps	Receive Fixed 3.10000, Pay Variable 12-Month SOFR	(55,193)	1,500,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.53500, Pay Variable 3-Month KRW KSDA	24	53,125
Receive Fixed Interest Rate Swaps	Receive Fixed 8.95000, Pay Variable 1-Month MXN TIIE	5,804	305,530
Receive Fixed Interest Rate Swaps	Receive Fixed 3.88400, Pay Variable 0-Month SOFR	(117,048)	19,172,500
Receive Fixed Interest Rate Swaps	Receive Fixed 4.20000, Pay Variable 0-Month SOFR	(1,880,569)	143,703,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.80000, Pay Variable 0-Month SOFR	(3,619,679)	442,463,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.50400, Pay Variable 0-Month SOFR	(48,882)	7,963,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.52400, Pay Variable 0-Month SOFR	(96,376)	21,013,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.16400, Pay Variable 0-Month SOFR	(477,212)	36,323,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.47250, Pay Variable 0-Month SOFR	(63,837)	7,436,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.14500, Pay Variable 0-Month SOFR	(499,624)	37,352,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.50000, Pay Variable 3-Month CNY CNRR	29,962	4,763,183
Receive Fixed Interest Rate Swaps	Receive Fixed 3.45389, Pay Variable 12-Month SOFR	(69,957)	3,900,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.86500, Pay Variable 0-Month SOFR	(72,190)	11,056,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.66550, Pay Variable 0-Month SOFR	(591,704)	84,062,000
Receive Fixed Interest Rate Swaps	Receive Fixed 7.90000, Pay Variable 6-Month PLN WIBOR	43,183	409,062
Receive Fixed Interest Rate Swaps	Receive Fixed 4.02700, Pay Variable 0-Month SOFR	(638)	12,239,000

**TABLE 19** continuing from the previous page

<b>Investment Type</b>	<b>Reference Rate</b>	<b>Fair Value</b>	<b>Notional Value</b>
Receive Fixed Interest Rate Swaps	Receive Fixed 3.89765, Pay Variable 12-Month SOFR	19,875	3,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.80800, Pay Variable 0-Month SOFR	94,842	5,351,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.33100 Pay Variable 0-Month SOFR	145,445	5,984,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.90250, Pay Variable 0-Month SOFR	(26,535)	5,530,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.82600, Pay Variable 0-Month SOFR	(110,629)	22,536,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.07600, Pay Variable 0-Month SOFR	31,212	14,478,000
Receive Fixed Interest Rate Swaps	Receive Fixed 9.16000, Pay Variable 3-Month ZAR JIBAR	(4,639)	200,781
Receive Fixed Interest Rate Swaps	Receive Fixed 3.33950, Pay Variable 12-Month SOFR	118,928	4,690,500
Receive Fixed Interest Rate Swaps	Receive Fixed 3.33900, Pay Variable 12-Month SOFR	118,493	4,690,500
Receive Fixed Interest Rate Swaps	Receive Fixed 4.44650, Pay Variable 12-Month SOFR	(209,283)	21,237,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.00000, Pay Variable 12-Month Euro ESTR	(677,951)	17,892,406
Receive Fixed Interest Rate Swaps	Receive Fixed 3.38450, Pay Variable 12-Month SOFR	(148,061)	9,676,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.68000, Pay Variable 0-Month CNY CNRR	5,405	394,408
Receive Fixed Interest Rate Swaps	Receive Fixed 3.64000, Pay Variable 12-Month SOFR	(150,739)	10,168,847
Receive Fixed Interest Rate Swaps	Receive Fixed 3.39900, Pay Variable 12-Month SOFR	(84,507)	5,969,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.94200, Pay Variable 12-Month SOFR	(738,705)	15,299,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.70000, Pay Variable 12-Month SOFR	(5,759,076)	518,135,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.82600, Pay Variable 12-Month SOFR	(161,252)	19,633,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.49800, Pay Variable 12-Month SOFR	(570,655)	62,345,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.06050, Pay Variable 12-Month SOFR	(55,796)	2,081,500
Receive Fixed Interest Rate Swaps	Receive Fixed 3.05750, Pay Variable 12-Month SOFR	(56,951)	2,081,500
Receive Fixed Interest Rate Swaps	Receive Fixed 3.44050, Pay Variable 12-Month SOFR	(164,801)	7,263,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.37200, Pay Variable 12-Month SOFR	120,018	3,859,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.63050, Pay Variable 12-Month SOFR	49,731	13,665,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.53900, Pay Variable 12-Month SOFR	186,060	2,987,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.47550, Pay Variable 12-Month SOFR	(104,686)	12,823,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.31050, Pay Variable 12-Month SOFR	(227,822)	10,784,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.28900, Pay Variable 12-Month SOFR	(542,049)	23,751,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.68450, Pay Variable 12-Month SOFR	49,027	6,127,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.42950, Pay Variable 12-Month SOFR	(155,069)	13,191,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.37150, Pay Variable 12-Month SOFR	(140,276)	8,610,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.64000, Pay Variable 12-Month SOFR	59,798	13,665,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.39100, Pay Variable 12-Month SOFR	(460,376)	31,132,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.21500, Pay Variable 12-Month SOFR	(284,192)	9,912,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.93500, Pay Variable 12-Month SOFR	(344,762)	6,969,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.71450, Pay Variable 12-Month SOFR	38,740	3,750,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.35500, Pay Variable 12-Month SOFR	(142,570)	8,099,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.32100, Pay Variable 12-Month SOFR	(10,366)	921,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.73000, Pay Variable 12-Month SOFR	(123,626)	20,136,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.18750, Pay Variable 12-Month SOFR	(425,105)	32,988,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.43750, Pay Variable 12-Month SOFR	(216,501)	21,737,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.48450, Pay Variable 12-Month SOFR	(128,385)	13,718,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.00000, Pay Variable 6-Month Euro EURIBOR	(2,748)	24,798,438
Receive Fixed Interest Rate Swaps	Receive Fixed 6.84500, Pay Variable 6-Month PLN WIBOR	19,409	281,569
Receive Fixed Interest Rate Swaps	Receive Fixed 3.25000, Pay Variable 3-Month KRW KSDA	(120,331)	8,370,296
Receive Fixed Interest Rate Swaps	Receive Fixed 3.25000, Pay Variable 12-Month SOFR	(209,358)	6,870,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.96500, Pay Variable 3-Month KRW KSDA	(10,925)	455,356
Receive Fixed Interest Rate Swaps	Receive Fixed 3.22475, Pay Variable 12-Month SOFR	(443,652)	14,900,000
Receive Fixed Interest Rate Swaps	Receive Fixed 12.50335, Pay Variable 0-Month BRL BRCDI	14,332	274,162
Receive Fixed Interest Rate Swaps	Receive Fixed 3.16312, Pay Variable 12-Month SOFR	(129,310)	3,900,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.19687, Pay Variable 3-Month KRW KSDA	44,766	1,593,746
Receive Fixed Interest Rate Swaps	Receive Fixed 3.10000, Pay Variable 3-Month KRW KSDA	(8,234)	455,356
Receive Fixed Interest Rate Swaps	Receive Fixed 8.71500, Pay Variable 3-Month ZAR JIBAR	(19,020)	346,164
Receive Fixed Interest Rate Swaps	Receive Fixed 8.10850, Pay Variable 1-Month MXN TIIE	(2,670)	254,220
Receive Fixed Interest Rate Swaps	Receive Fixed 12.68830, Pay Variable 0-Month BRL BRCDI	27,333	481,311
Receive Fixed Interest Rate Swaps	Receive Fixed 3.25000, Pay Variable 3-Month KRW KSDA	(463,115)	40,219,573
Receive Fixed Interest Rate Swaps	Receive Fixed 4.75000, Pay Variable 3-Month NZD NZDDBB	(51,766)	8,393,307
Receive Fixed Interest Rate Swaps	Receive Fixed 3.08000, Pay Variable 12-Month SOFR	(46,217)	1,600,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.34000, Pay Variable 12-Month SOFR	(69,019)	2,400,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.25000, Pay Variable 12-Month GBP SONIA	(480,130)	5,085,403
Receive Fixed Interest Rate Swaps	Receive Fixed 4.00000, Pay Variable 12-Month GBP SONIA	(235,439)	6,611,024
Receive Fixed Interest Rate Swaps	Receive Fixed 3.00000, Pay Variable 6-Month Euro EURIBOR	82,148	43,967,314

TABLE 19 continuing from the previous page

Investment Type	Reference Rate	Fair Value	Notional Value
Receive Fixed Interest Rate Swaps	Receive Fixed 5.25000, Pay Variable 3-Month NZD NZDDB	(14,591)	9,434,812
Receive Fixed Interest Rate Swaps	Receive Fixed 3.00000, Pay Variable 6-Month Euro EURIBOR	(865,885)	95,462,530
Receive Fixed Interest Rate Swaps	Receive Fixed 3.75000, Pay Variable 12-Month GBP SONIA	(538,134)	10,043,671
Receive Fixed Interest Rate Swaps	Receive Fixed 3.50000, Pay Variable 12-Month GBP SONIA	(2,840,675)	44,878,681
Receive Fixed Interest Rate Swaps	Receive Fixed 3.29750, Pay Variable 12-Month SOFR	(5,487)	250,000
Receive Fixed Interest Rate Swaps	Receive Fixed 5.17386, Pay Variable 6-Month PLN WIBOR	1,809	235,297
Receive Fixed Interest Rate Swaps	Receive Fixed 5.30500, Pay Variable 6-Month PLN WIBOR	3,328	251,267
Receive Fixed Interest Rate Swaps	Receive Fixed 3.24800, Pay Variable 12-Month SOFR	85,631	9,522,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.10000, Pay Variable 3-Month Euro EURIBOR	(66,884)	4,800,401
Receive Fixed Interest Rate Swaps	Receive Fixed 2.10000, Pay Variable 3-Month Euro EURIBOR	(154,222)	10,910,003
Receive Fixed Interest Rate Swaps	Receive Fixed 3.00000, Pay Variable 6-Month SGD SORA	(60,173)	4,233,938
Receive Fixed Interest Rate Swaps	Receive Fixed 3.28300, Pay Variable 12-Month SOFR	(15,879)	689,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.25000, Pay Variable 3-Month THB THOR	(7,430)	936,398
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000, Pay Variable 12-Month SOFR	(110,718)	8,700,000
Receive Fixed Interest Rate Swaps	Receive Fixed 0.50000, Pay Variable 3-Month LIBOR	(91,787)	8,700,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.25000, Pay Variable 3-Month Euro EURIBOR	(23,592)	1,745,601
Receive Fixed Interest Rate Swaps	Receive Fixed 2.25000, Pay Variable 3-Month Euro EURIBOR	(23,714)	1,745,601
Receive Fixed Interest Rate Swaps	Receive Fixed 2.25000, Pay Variable 3-Month Euro EURIBOR	(23,967)	1,745,601
Receive Fixed Interest Rate Swaps	Receive Fixed 7.76600, Pay Variable 3-Month ZAR JIBAR	(32,459)	956,316
Receive Fixed Interest Rate Swaps	Receive Fixed 4.00000, Pay Variable 6-month AUD BBSW	(38,053)	1,198,170
Receive Fixed Interest Rate Swaps	Receive Fixed 11.55000, Pay Variable 0-Month BRL BRCDI	14,316	588,050
Receive Fixed Interest Rate Swaps	Receive Fixed 11.35880 Pay Variable 0-Month BRL BRCDI	15,562	746,534
Receive Fixed Interest Rate Swaps	Receive Fixed 3.17838 Pay Variable 12-Month SOFR	(397,309)	12,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 2.98000 Pay Variable 0-Month SOFR	(2,360,997)	63,998,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.25000, Pay Variable 6-Month CAD CORRA	(723,347)	32,873,607
Receive Fixed Interest Rate Swaps	Receive Fixed 3.25000, Pay Variable 6-Month CAD CORRA	(102,216)	6,196,864
Receive Fixed Interest Rate Swaps	Receive Fixed 2.10000, Pay Variable 3-Month Euro EURIBOR	(53,088)	3,382,101
Receive Fixed Interest Rate Swaps	Receive Fixed 3.26100, Pay Variable 12-Month SOFR	(194,117)	6,569,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.40950, Pay Variable 12-Month SOFR	(208,833)	11,415,000
Receive Fixed Interest Rate Swaps	Receive Fixed 1.61700, Pay Variable 3-Month SOFR	(371,076)	3,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 5.25514 Pay Variable 3-Month LIBOR	(10,809)	3,000,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.59750, Pay Variable 3-Month MYR KLIBOR	(2,203)	685,592
Receive Fixed Interest Rate Swaps	Receive Fixed 3.56500, Pay Variable 3-Month MYR KLIBOR	(2,214)	471,344
Receive Fixed Interest Rate Swaps	Receive Fixed 4.47100, Pay Variable 3-Month NZD NZDDB	(11,830)	4,031,238
Receive Fixed Interest Rate Swaps	Receive Fixed 3.61500, Pay Variable 3-Month MYR KLIBOR	(1,138)	471,344
Receive Fixed Interest Rate Swaps	Receive Fixed 2.75000, Pay Variable 0-Month CNRR	149,518	9,017,008
Receive Fixed Interest Rate Swaps	Receive Fixed 5.09500 Pay Variable 6-Month CLP CLICP	3,906	497,276
Receive Fixed Interest Rate Swaps	Receive Fixed 0.68600, Pay Variable 12-Month JPY TONAR	55,205	4,358,806
Receive Fixed Interest Rate Swaps	Receive Fixed 8.45500, Pay Variable 3-Month ZAR JIBAR	(1,847)	185,396
Receive Fixed Interest Rate Swaps	Receive Fixed 10.53850, Pay Variable 0-Month BRL BRCDI	7,801	738,898
Receive Fixed Interest Rate Swaps	Receive Fixed 3.50000, Pay Variable 12-Month SOFR	18,894	3,800,000
Receive Fixed Interest Rate Swaps	Receive Fixed 10.36000, Pay Variable 0-Month BRL BRCDI	4,179	1,013,156
Receive Fixed Interest Rate Swaps	Receive Fixed 5.00800, Pay Variable 6-Month CLP CLICP	1,412	347,653
Receive Fixed Interest Rate Swaps	Receive Fixed 3.54500, Pay Variable 3-Month MYR KLIBOR	(2,404)	428,495
Receive Fixed Interest Rate Swaps	Receive Fixed 4.42000, Pay Variable 3-Month NZD NZDDB	(23,108)	3,345,070
Receive Fixed Interest Rate Swaps	Receive Fixed 4.85000, Pay Variable 6-Month CLP CLICP	(1,474)	520,913
Receive Fixed Interest Rate Swaps	Receive Fixed 8.98000, Pay Variable 3-Month ZAR JIBAR	1,559	188,235
Receive Fixed Interest Rate Swaps	Receive Fixed 10.34500, Pay Variable 0-Month BRL BRCDI	2,886	410,137
Receive Fixed Interest Rate Swaps	Receive Fixed 7.97000, Pay Variable 1-Month MXN TIIE	(287)	270,254
Receive Fixed Interest Rate Swaps	Receive Fixed 7.87240, Pay Variable 1-Month MXN TIIE	(2,783)	370,252
Receive Fixed Interest Rate Swaps	Receive Fixed 3.20000, Pay Variable 12-Month SOFR	129,201	16,654,000
Receive Fixed Interest Rate Swaps	Receive Fixed 4.65000, Pay Variable 12-Month SOFR	(60,693)	20,136,000
Receive Fixed Interest Rate Swaps	Receive Fixed 10.31400, Pay Variable 0-Month BRL BRCDI	564	314,489
Receive Fixed Interest Rate Swaps	Receive Fixed 4.79850, Pay Variable 12-Month SOFR	1,294	45,660,000
Receive Fixed Interest Rate Swaps	Receive Fixed 3.56250, Pay Variable 12-Month SOFR	11,833	19,039,000
Subtotal - Receive Fixed Interest Rate Swaps		(48,365,874)	2,868,309,845
<b>Total Interest Rate Swaps</b>		<b>\$ 1,208,642</b>	<b>\$ 6,409,029,478</b>



### 3. FOREIGN CURRENCY RISK

OPERF is exposed to foreign currency risk on its derivative instruments. Table 20 presents a summary of derivative instruments subject to foreign currency risk as of June 30, 2023.

TABLE 20

<b>Derivative Instruments Subject to Foreign Currency Risk as of June 30, 2023</b>					
<b>Currency Name</b>	<b>Currency Forward Contracts</b>		<b>Options/Rights/ Warrants</b>	<b>Swaps</b>	<b>Total Exposure</b>
	<b>Net Receivables</b>	<b>Net Payables</b>			
Australian dollar	\$ (8,142,229)	\$ 9,411,857	\$ –	\$ 676,581	\$ 1,946,209
Bahraini dinar	116	(8,621)	–	–	(8,505)
Brazilian real	19,883,255	(20,315,269)	–	26,836	(405,178)
Canadian dollar	4,243,157	(8,484,590)	–	(577,817)	(4,819,250)
Chilean peso	216,795	(3,197,718)	–	8,696	(2,972,227)
Colombian peso	3,057,613	(2,858,361)	–	(48,608)	150,644
Czech koruna	745,732	(2,457,812)	–	(1,615)	(1,713,695)
Danish krone	1,715,345	1,213,055	–	–	2,928,400
Egyptian pound	(300,965)	(40,776)	–	–	(341,741)
Euro <sup>1</sup>	5,196,614	(3,609,708)	30,564	(8,594,807)	(6,977,337)
Hong Kong dollar	(23,985)	137,490	–	–	113,505
Hungarian forint	98,939	(6,102,305)	–	–	(6,003,366)
Indian rupee	1,273,541	(465,618)	–	–	807,923
Indonesian rupiah	55,725	183,228	–	–	238,953
Japanese yen	(28,144,505)	145,655,079	–	(968,906)	116,541,668
Kazakhstan tenge	10,524	(17,148)	–	–	(6,624)
Kuwaiti dinar	4,960	(1,333)	–	–	3,627
Malaysian ringgit	–	357,837	–	78,232	436,069
Mexican peso	15,308,438	(11,459,989)	–	(1,151,912)	2,696,537
Moroccan dirham	178,705	(8,155)	–	–	170,550
New Israeli sheqel	(1,948,900)	2,744,223	–	–	795,323
New Taiwan dollar	(2,946,610)	4,939,326	–	–	1,992,716
New Zealand dollar	(4,962,960)	4,995,621	–	(463,111)	(430,450)
Norwegian krone	(6,754,151)	4,088,741	–	2,596,582	(68,828)
Peruvian nuevo sol	84,836	(124,620)	–	–	(39,784)
Philippine peso	268,790	(98,764)	–	–	170,026
Polish zloty	629,148	(3,804,939)	–	14,719	(3,161,072)
Pound sterling	12,769,837	(16,983,263)	(5,286)	(4,094,378)	(8,313,090)
Romanian leu	4,518	6,572	–	–	11,090
Russian ruble	802,869	3,620,247	–	–	4,423,116
Saudi riyal	2,098	(5,470)	–	–	(3,372)
Serbian dinar	53,780	–	–	–	53,780
Singapore dollar	(2,381,070)	2,245,953	1,056	(60,173)	(194,234)
South African rand	(7,483,010)	3,630,507	–	(6,254)	(3,858,757)
South Korean won	(2,752,543)	3,000,388	–	(559,630)	(311,785)
Swedish krona	(6,281,045)	10,525,254	–	–	4,244,209
Swiss franc	5,751,823	(3,536,870)	–	(326,447)	1,888,506
Thailand baht	(80,396)	167,083	–	(7,430)	79,257
Turkish lira	(2,551,882)	218,377	–	–	(2,333,505)
United Arab Emirates dirham	(732)	(357)	–	–	(1,089)
Yuan renminbi	(255,255)	3,282,632	–	184,884	3,212,261
Yuan renminbi - offshore	(7,847,650)	10,940,114	–	–	3,092,464
<b>Total Subject to Foreign Currency Risk</b>	<b>(10,500,730)</b>	<b>127,781,898</b>	<b>26,334</b>	<b>(13,274,558)</b>	<b>104,032,944</b>
U.S. dollar	–	–	9,624,019	14,696,940	24,320,959
<b>Total</b>	<b>\$ (10,500,730)</b>	<b>\$ 127,781,898</b>	<b>\$ 9,650,353</b>	<b>\$ 1,422,382</b>	<b>\$ 128,353,903</b>

<sup>1</sup> Represents all of the positions with a Euro leg. It is not solely USD/Euro activity.

## **Note 5 - Capital Assets and Leases 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.

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

TABLE 21

**Schedule of Changes in Capital Assets for the Fiscal Year Ended June 30, 2023**

	Beginning of Year	Increases	Decreases	End of Year
<b>Capital assets, not being depreciated or amortized:</b>				
Land	\$ 944,463	\$ -	\$ -	\$ 944,463
<b>Total capital assets, not being depreciated or amortized</b>	<b>944,463</b>	<b>-</b>	<b>-</b>	<b>944,463</b>
<b>Capital assets, being depreciated or amortized:</b>				
Furniture and Equipment	1,444,733	10,721	(73,921)	1,381,533
Data Processing Software	40,709,577	115,361	-	40,824,937
Data Processing Hardware	2,793,167	89,506	(1,377,489)	1,505,184
Building and Building Improvements	10,200,872	-	(257,543)	9,943,328
Right-To-Use-Asset - Building Lease	644,023	-	-	644,023
Right-To-Use-Asset - Equipment Lease	167,306	-	-	167,306
<b>Total capital assets being depreciated or amortized</b>	<b>55,959,678</b>	<b>215,589</b>	<b>(1,708,954)</b>	<b>54,466,312</b>
<b>Less accumulated depreciation or amortization for:</b>				
Furniture and Equipment	(1,330,073)	(51,740)	63,200	(1,318,612)
Data Processing Software	(26,694,847)	(1,909,667)	-	(28,604,514)
Data Processing Hardware	(1,944,996)	(424,949)	1,377,489	(992,456)
Building and Building Improvements	(5,521,594)	(383,357)	257,543	(5,647,407)
Right-To-Use-Asset - Building Lease	(295,177)	(295,177)	-	(590,354)
Right-To-Use-Asset - Equipment Lease	(87,648)	(41,827)	-	(129,475)
<b>Total accumulated depreciation or amortization</b>	<b>(35,874,335)</b>	<b>(3,106,715)</b>	<b>1,698,232</b>	<b>(37,282,818)</b>
<b>Total capital assets, being depreciated or amortized, net</b>	<b>20,085,344</b>	<b>(2,891,127)</b>	<b>(10,721)</b>	<b>17,183,495</b>
<b>Capital assets, net</b>	<b>\$ 21,029,807</b>	<b>\$ (2,891,127)</b>	<b>\$ (10,721)</b>	<b>\$ 18,127,958</b>

**Depreciation and Amortization expense**

	<b>Amount</b>
Defined Benefit Pension Plan	\$3,084,483
Individual Account Program	22,232
<b>Total Depreciation and Amortization expense</b>	<b>\$ 3,106,715</b>

**Leases Payable**

The lease liability activity for the fiscal year ended June 30, 2023, is as follows:

	June 30, 2022	Addition	Reduction	June 30, 2023
Building Lease	\$ 402,038	\$ -	\$ (402,038)	\$ -
Equipment Lease	86,173	-	(49,793)	36,380
<b>Totals</b>	<b>\$ 488,211</b>	<b>\$ -</b>	<b>\$ (451,831)</b>	<b>\$ 36,380</b>

The principal and interest payments on the lease liability as of June 30, 2023, are as follows:

Year	Equipment Leases		
	Principal	Interest	Total
2024	\$ 22,834	\$ 754	\$ 23,588
2025	8,033	346	8,379
2026	5,513	73	5,586
	<b>\$ 36,380</b>	<b>\$ 1,173</b>	<b>\$ 37,553</b>

## 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.

### A. CHAPTER 238 DEFINED BENEFIT PLAN

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

**TABLE 22**

<b>Reserves and Designations as of June 30, 2023</b>	<b>Defined Benefit Pension Plan</b>
Chapter 238 Defined Benefit Plan and Employee Benefit Plan	
Member Reserve	\$ 3,507,305,974
Employer Contribution Designation	48,313,920,119
Benefit Reserve	16,309,196,239
Tier One Rate Guarantee Reserve	736,511,400
Contingency Reserve	47,481,112
Employer Contingency Reserve	2,500,000
Unallocated Earnings Designation	2,293,959,950
OPSRP Defined Benefit Program	11,796,780,025
Employee Pension Stability Account Reserves	479,963,247
<b>Net Position Restricted for Pension Benefits</b>	<b>\$ 83,487,618,066</b>

#### *i. Member Reserve*

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

#### *ii. 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 \$5,814.8 million as of June 30, 2023. Side account balances are included in the Employer Contribution Designation reserve.

#### *iii. 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 plus earnings allocations less amounts paid for retirements and disability benefits.

#### *iv. 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 PERS 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 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 the reserve has been fully funded as described in each of the three immediately preceding calendar years.

#### ***v. Contingency Reserve***

The Contingency Reserve is maintained and used by the PERS 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.

#### ***vi. Employer Contingency Reserve***

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

#### ***vii. Unallocated Earnings Designation***

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

#### ***viii. 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.

#### ***ix. Employee Pension Stability Account Reserves***

EPSA Reserves represent 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.

### **B. OTHER POSTEMPLOYMENT BENEFITS PLANS**

#### ***i. Retirement Health Insurance Account (RHIA)***

The RHIA plan fiduciary net position balance represents the program's accumulation of employer contributions and investment earnings, less premium subsidies and administrative expenses. As of June 30, 2023, the balance of this account was \$726.6 million. The Internal Revenue Code limits employer contributions to a 401(h) account to a maximum of 25% of the employer's normal cost contributions to the pension plan.

#### ***ii. 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, 2023, the balance of this account was \$91.4 million. The Internal Revenue Code limits employer contributions to a 401(h) account to a maximum of 25% of the employer's normal cost contributions to the pension plan.

### **C. OTHER PLANS**

#### ***i. 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, 2023, the balance of this account was \$12,974.9 million. Member contributions are described in Note 2.D.1. (page 58). 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.

## ***ii. 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, 2023, the balance of this account was \$2,810.9 million. The Internal Revenue Code (IRC) limits plan member contributions to an IRC 457 account to a maximum of \$20,500 (calendar year 2022), with optional catch-up provisions available to members over age 50.

## **D. ENTERPRISE FUND**

### ***i. 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, 2023, the balance of this account was \$91.5 million.

## **Note 7 - Litigation**

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

## **Note 8 - Standard Retiree Health Insurance Account (SRHIA)**

### **A. BASIS FOR ESTIMATED LIABILITIES**

The 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 shows the changes in the aggregated estimated claims liabilities for the fiscal years that ended on June 30 in 2023 and 2022.

The estimated claims liability was calculated by Butler Partners & Associates, PERS' health insurance consultant, on June 30, 2023, 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 \$876,000 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, 2023, but have not been reported to the SRHIA.

TABLE 23

<b>Changes in the Aggregated Estimated Claims Liabilities of SRHIA</b>		
<b>For the Fiscal Year Ended June 30,</b>		
	<b>2023</b>	<b>2022</b>
Total Estimated Claims at Beginning of Fiscal Year	\$ 848,000	\$ 830,000
<b>Insured Claims and Claim Adjustment Expenses</b>		
Provision for Insured Events of Current Fiscal Year	27,342,050	30,271,731
Increase in Provision for Insured Events of Prior Years	804,117	781,678
Total Incurred Claims and Claim Adjustment Expenses	28,146,167	31,053,409
<b>Payments</b>		
Claims and Claim Adjustment Expenses Attributable to Insured Events of Current Fiscal Year	27,314,050	30,253,731
Claims and Claim Adjustment Expenses Attributable to Insured Events of Prior Fiscal Year	804,117	781,678
Total Payments	28,118,167	31,035,409
<b>Total Estimated Claims at End of Fiscal Year</b>	<b>\$ 876,000</b>	<b>\$ 848,000</b>

## 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. 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 cost-sharing between the employer and plan members. The December 31, 2021, system-wide actuarial valuation was used to develop the GASB 67 financial reporting results for the Defined Benefit Pension Plan as of June 30, 2023, using standard roll-forward procedures. Key actuarial methods and assumptions used to measure the total pension liability are illustrated in Table 25.

### B. DISCOUNT RATE

The discount rate used to measure the total pension liability was 6.9% for the Defined Benefit Pension Plan. The projection of cash flows used to determine the discount rate assumed that contributions from plan members and contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments for the Defined Benefit Pension Plan was applied to all periods of projected benefit payments to determine the total pension liability.

### C. SENSITIVITY ANALYSIS

Table 26 presents the net pension liability calculated using the discount rate of 6.9% as well as what the net pension liability would be if it were calculated using a discount rate that is 1% lower (5.9%) or 1% higher (7.9%) than the current rate. The results of actuarial valuations used for rate setting and the related Schedules of Funding Progress are in the Actuarial Section beginning on page 129.

## 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 January 2023 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 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 in Table 31. 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 recommend a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

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

- PERS has a formal written policy to calculate an Actuarially Determined Contribution (ADC), which is articulated in the actuarial valuation report.
- The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will bring the plan to a 100% funded position by the end of the amortization period if future experience follows assumption.
- GASB 67 specifies that the projections regarding future solvency assume that plan assets earn the assumed rate of return and there are no future changes in the plan provisions or actuarial methods and assumptions. This 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.

**TABLE 24**

<b>Net Pension Liability (in Millions)</b>	
<b>As of June 30,</b>	
	<b>2023</b>
Total Pension Liability	\$ 102,218.3
Plan Fiduciary Net Position	83,487.6
<b>Employers' Net Pension Liability</b>	<b>\$ 18,730.7</b>
Plan net position as a percentage of total pension liability	81.7 %



TABLE 25

<u>Actuarial Methods and Assumptions</u>	
	<u>Pension</u>
Valuation date	December 31, 2021
Measurement date	June 30, 2023
Experience Study	2020, published July 20, 2021
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 <i>Moro</i> decision; blend based on service.
Mortality	<p><b>Healthy retirees and beneficiaries:</b> 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.</p> <p><b>Active members:</b> Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p><b>Disabled retirees:</b> 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.</p>

TABLE 26

<u>Sensitivity of Net Pension Liability to Changes in the Discount Rate (in Millions)</u>			
<u>As of June 30, 2023</u>			
<u>Employers' Net Pension Liability</u>	<u>1% Decrease (5.90 %)</u>	<u>Current Discount Rate (6.90%)</u>	<u>1% Increase (7.90 %)</u>
Defined Benefit Pension Plan	\$ 30,939.6	\$ 18,730.7	\$ 8,513.1

## 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. 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, 2021, valuation rolled forward to June 30, 2023. Key actuarial methods and assumptions used to measure the total OPEB liability are illustrated in Table 28.

## B. DISCOUNT RATE

The discount rate used to measure the total OPEB liability was 6.9% for the OPEB plans. The projection of cash flows used to determine the discount rate assumed that contributions from contributing employers are made at the contractually required rates, as actuarially determined. Based on those assumptions, the OPEB plans' fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on OPEB plan investments for the OPEB plans was applied to all periods of projected benefit payments to determine the total OPEB liability.

## C. SENSITIVITY ANALYSIS

Table 29 presents the net OPEB (asset) calculated using the discount rate of 6.9%, as well as what the net OPEB (asset) would be if it were calculated using a discount rate that is 1% lower (5.9%) or 1% higher (7.9%) 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 129.

Table 30 presents the net OPEB (asset) calculated using the current healthcare cost trend rates. It also presents what the net OPEB (asset) would be if it were calculated using healthcare.

## 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 January 2023 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 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 in Table 31. 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 recommend a specific method for making an alternative evaluation of sufficiency; it is left to professional judgment.

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

- PERS has a formal written policy to calculate an Actuarially Determined Contribution (ADC), which is articulated in the actuarial valuation report.
- The ADC is based on a closed, layered amortization period, which means that payment of the full ADC each year will bring the plan to a 100% funded position by the end of the amortization period if future experience follows assumption.
- GASB 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. This 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.

**TABLE 27**

<b><u>Net OPEB - RHIA (Asset) (in Millions)</u></b>		<b><u>Net OPEB - RHIPA (Asset) (in Millions)</u></b>	
<b><u>As of June 30, 2023</u></b>		<b><u>As of June 30, 2023</u></b>	
	<b><u>2023</u></b>		<b><u>2023</u></b>
Total OPEB - RHIA Liability	\$ 360.4	Total OPEB - RHIPA Liability	\$ 47.3
Plan Fiduciary Net Position	<u>726.6</u>	Plan Fiduciary Net Position	<u>91.4</u>
<b>Employers' Net OPEB - RHIA (Asset)</b>	<b><u>\$ (366.2)</u></b>	<b>Employer's Net OPEB - RHIPA (Asset)</b>	<b><u>\$ (44.1)</u></b>
Plan net position as a percentage of Total OPEB - RHIA Liability	201.6 %	Plan net position as a percentage of Total OPEB - RHIPA Liability	193.2 %

**TABLE 28**

<b><u>Actuarial Methods and Assumptions</u></b>				
	<b><u>RHIA</u></b>		<b><u>RHIPA</u></b>	
Valuation date	December 31, 2021		December 31, 2021	
Measurement date	June 30, 2023		June 30, 2023	
Experience Study	2020, published July 20, 2021		2020, published July 20, 2021	
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: 27.5% Disabled retirees: 15.0 %		8-14 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%	
Healthcare cost trend rate	Not applicable		Applied at beginning of plan year, starting with 5.9% for 2021, decreasing to 4.7% for 2028, increasing to 4.8% for 2037, increasing to 4.9% for 2046, and decreasing to an ultimate rate of 3.9% for 2074 and beyond.	
Mortality	<p><b>Healthy retirees and beneficiaries:</b> 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.</p> <p><b>Active members:</b> Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p><b>Disabled retirees:</b> 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.</p>		<p><b>Healthy retirees and beneficiaries:</b> 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.</p> <p><b>Active members:</b> Pub-2010 Employee, sex distinct, generational with Unisex, Social Security Data Scale, with job category adjustments and set-backs as described in the valuation.</p> <p><b>Disabled retirees:</b> 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.</p>	

**TABLE 29**

<b>Sensitivity of Net OPEB (Asset) to Changes in the Discount Rate (in Millions)</b>				
<b>As of June 30, 2023</b>				
<b>Employers' Net OPEB (Asset)</b>	<b>1% Decrease (5.90 %)</b>	<b>Current Discount Rate (6.90%)</b>	<b>1% Increase (7.90 %)</b>	
Other Postemployment Benefit Plan - RHIA	\$ (332.8)	\$ (366.2)	\$ (394.8)	
Other Postemployment Benefit Plan - RHIPA	\$ (41.4)	\$ (44.1)	\$ (46.6)	

**TABLE 30**

<b>Sensitivity of Net OPEB (Asset) to Changes in the Healthcare Cost Trend Rate (in Millions)</b>				
<b>As of June 30, 2023</b>				
<b>Employers' Net OPEB (Asset)</b>	<b>1% Decrease</b>	<b>Current Trend Rate</b>	<b>1% Increase</b>	
Other Postemployment Benefit Plan - RHIA	\$ (366.2)	\$ (366.2)	\$ (366.2)	
Other Postemployment Benefit Plan - RHIPA	(47.7)	(44.1)	(40.0)	

**TABLE 31**

<b>Long-Term Expected Rate of Return <sup>1</sup></b>				
<b>Asset Class</b>	<b>Target Allocation</b>	<b>Annual Arithmetic Return <sup>2</sup></b>	<b>20-Year Annualized Geometric Mean</b>	<b>Annual Standard Deviation</b>
Global Equity	27.50 %	8.57 %	7.07 %	17.99 %
Private Equity	25.50	12.89	8.83	30.00
Core Fixed Income	25.00	4.59	4.50	4.22
Real Estate	12.25	6.90	5.83	15.13
Master Limited Partnerships	0.75	9.41	6.02	27.04
Infrastructure	1.50	7.88	6.51	17.11
Hedge Fund of Funds - Multistrategy	1.25	6.81	6.27	9.04
Hedge Fund Equity - Hedge	0.63	7.39	6.48	12.04
Hedge Fund - Macro	5.62	5.44	4.83	7.49
Assumed Inflation - Mean			2.35 %	1.41 %

<sup>1</sup> 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 January 25, 2023.

<sup>2</sup> 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.

## Note 11– Effect of Future Pronouncements

The future GASB pronouncements that may have an impact to PERS financial statements are as follows:

- GASB Statement No. 100, *Accounting Changes and Error Corrections – an Amendment of GASB Statement No. 62*, was issued in June 2022. This statement prescribes the accounting and financial reporting for (1) each type of accounting change and (2) error corrections. This statement requires that (a) changes in accounting principles and error corrections be reported retroactively by restating prior periods, (b) changes to or within the financial reporting entity be reported by adjusting beginning balances of the current period, and (c) changes in accounting estimates be reported prospectively by recognizing the change in the current period. The requirements of this statement are effective with fiscal years beginning after June 15, 2023. PERS management is currently evaluating the impacts of this statement.
- GASB Statement No. 101, *Compensated Absences*, was issued in June 2022. This statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means. A liability should be recognized for leave that has not been used if (a) the leave is attributable to services already rendered, (b) the leave accumulates, and (c) the leave is more likely than not to be used for time off or otherwise paid in cash or settled through noncash means. The requirements of this statement are effective with fiscal years beginning after December 15, 2023. PERS management is currently evaluating the impacts of this statement.



**Required Supplementary Information**

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

	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>
<b>Total Pension Liability</b> <sup>1</sup>					
Service Cost	\$ 1,485.2	\$ 1,387.7	\$ 1,263.5	\$ 1,187.2	\$ 1,146.4
Interest on Total Pension Liability	6,694.3	6,505.6	6,349.3	6,162.9	5,952.1
Effect of Plan Changes <sup>2</sup>	-	-	148.5	-	(50.6)
Changes in Benefit Terms	-	-	-	-	-
Changes in Assumptions	-	490.3	3,041.9	(50.5)	-
Differences Between Expected and Actual Experience	636.0	(116.7)	600.9	406.7	804.2
Benefit Payments, including refunds of contributions	(5,678.8)	(5,483.1)	(5,249.0)	(5,064.8)	(4,827.0)
Net Change in Total Pension Liability	3,136.7	2,783.8	6,155.1	2,641.5	3,025.1
Total Pension Liability - Beginning	99,081.6	96,297.8	90,142.7	87,501.2	84,476.1
Total Pension Liability - Ending	<u>\$ 102,218.3</u>	<u>\$ 99,081.6</u>	<u>\$ 96,297.8</u>	<u>\$ 90,142.7</u>	<u>\$ 87,501.2</u>
<b>Plan Fiduciary Net Position</b>					
Employer Contributions	\$ 2,392.9	\$ 4,030.2	\$ 2,161.5	\$ 2,299.0	\$ 1,720.2
Member Contributions	167.5	160.1	160.3	10.2	11.4
Net Investment and Other Income	2,904.1	789.8	18,998.4	923.3	4,010.0
Benefit Payments	(5,668.6)	(5,468.2)	(5,237.2)	(5,064.8)	(4,815.1)
Refunds of Contributions	(10.2)	(14.9)	(11.9)	-	(11.9)
Administrative Expense	(67.7)	(58.7)	(59.1)	(52.1)	(38.4)
Net Change in Plan Fiduciary Net Position	(282.0)	(561.7)	16,012.0	(1,884.4)	876.2
Plan Fiduciary Net Position - Beginning	83,769.6	84,331.3	68,319.3	70,203.7	69,327.5
Plan Fiduciary Net Position - Ending	<u>\$ 83,487.6</u>	<u>\$ 83,769.6</u>	<u>\$ 84,331.3</u>	<u>\$ 68,319.3</u>	<u>\$ 70,203.7</u>
<b>Net Pension Liability</b>	\$ 18,730.7	\$ 15,312.0	\$ 11,966.5	\$ 21,823.4	\$ 17,297.5
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	81.7 %	84.5 %	87.6 %	75.8 %	80.2 %
Covered Payroll	\$ 14,455.0	\$ 12,942.6	\$ 12,235.5	\$ 11,574.8	\$ 10,716.7
Net Pension Liability as a Percentage of Covered Payroll	129.58 %	118.31 %	97.8 %	188.5 %	161.4 %

<sup>1</sup> See Table 25 for Actuarial Methods and Assumptions

<sup>2</sup> 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**

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual Money-Weighted Rate of Return Net of Investment Expense	3.0%	6.2%	26.2%	0.5%	6.4%	9.7%	11.8%	1.6%	3.7%	17.2%

Continued on the next page.



2018	2017	2016	2015	2014
\$ 1,108.2	\$ 1,105.5	\$ 1,016.8	\$ 960.9	\$ 1,020.3
5,858.2	5,662.2	5,355.3	4,779.5	4,819.4
—	—	—	—	—
—	—	—	5,353.5	(2,423.6)
2,240.3	—	3,946.4	—	—
74.3	351.8	317.3	380.0	—
<u>(4,656.6)</u>	<u>(4,362.2)</u>	<u>(4,206.5)</u>	<u>(3,943.6)</u>	<u>(3,863.4)</u>
4,624.4	2,757.3	6,429.3	7,530.3	(447.3)
79,851.7	77,094.4	70,665.1	63,134.8	63,582.1
<u>\$ 84,476.1</u>	<u>\$ 79,851.7</u>	<u>\$ 77,094.4</u>	<u>\$ 70,665.1</u>	<u>\$ 63,134.8</u>
\$ 1,390.1	\$ 1,022.2	\$ 977.3	\$ 1,123.3	\$ 915.2
12.6	13.1	14.2	13.8	15.3
6,247.5	7,660.0	413.9	2,364.5	9,886.6
(4,642.7)	(4,346.2)	(4,193.3)	(3,927.2)	(3,837.8)
(13.9)	(16.0)	(13.1)	(16.5)	(25.6)
<u>(37.8)</u>	<u>(43.5)</u>	<u>(40.5)</u>	<u>(35.7)</u>	<u>(31.2)</u>
2,955.8	4,289.6	(2,841.5)	(477.8)	6,922.5
66,371.7	62,082.1	64,923.6	65,401.4	58,478.9
<u>\$ 69,327.5</u>	<u>\$ 66,371.7</u>	<u>\$ 62,082.1</u>	<u>\$ 64,923.6</u>	<u>\$ 65,401.4</u>
\$ 15,148.6	\$ 13,480.0	\$ 15,012.3	\$ 5,741.5	\$ (2,266.6)
82.1 %	83.1 %	80.5 %	91.9 %	103.6 %
\$ 10,044.0	\$ 10,037.5	\$ 9,428.4	\$ 9,000.2	\$ 8,701.7
150.8 %	134.3 %	159.2 %	63.8 %	(26.0) %

Continued from the first page.

**Required Supplementary Information**

**Schedule of Defined Benefit Pension Plan Employer Contributions<sup>3</sup> (Unaudited)**

**Last 10 Fiscal Years**

**(Dollar amounts in thousands)**

	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Actuarially determined contributions <sup>1</sup>	\$ 2,226,974	\$ 2,117,323	\$ 2,058,483	\$ 1,981,943	\$ 1,410,966
Contributions in relation to the actuarially determined contributions <sup>2</sup>	2,226,974	2,117,323	2,058,483	1,981,943	1,410,966
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 14,455,011	\$ 12,942,642	\$ 12,235,510	\$ 11,574,796	\$ 10,716,707
Contributions as a percentage of covered payroll	15.41%	16.36%	16.82%	17.12%	13.17%

**Notes:**

<sup>1</sup> 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.

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

<sup>3</sup> For Actuarial Assumptions and Methods, see table below.

<b>Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions</b>			
<b>Actuarial Valuation:</b>	<b>December 31, 2019</b>	<b>December 31, 2017</b>	<b>December 31, 2015</b>
Effective:	July 2021 - June 2023	July 2019 - June 2021	July 2017 - June 2019
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 payroll
Asset valuation method:	Fair value	Fair value	Fair value
Remaining amortization periods:	20 years	20 years	20 years
Actuarial assumptions:			
Inflation rate	2.40 percent	2.50 percent	2.50 percent
Projected salary increases	3.40 percent	3.50 percent	3.50 percent
Investment rate of return	6.90 percent	7.20 percent	7.50 percent

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2018	2017	2016	2015	2014
\$ 1,318,672	\$ 960,254	\$ 941,321	\$ 909,912	\$ 866,635
1,318,672	960,254	941,321	909,912	866,635
\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,044,005	\$ 10,037,542	\$ 9,428,447	\$ 9,000,246	\$ 8,701,657
13.13%	9.57%	9.98%	10.11%	9.96%

December 31, 2013	December 31, 2011	December 31, 2009
July 2015 - June 2017	July 2013 - June 2015	July 2011 - June 2013
Entry Age Normal	Projected Unit Credit	Projected Unit Credit
Level percentage of payroll	Level percentage of payroll	Level percentage of payroll
Fair value	Fair value	Fair value
20 years	N/A	N/A
2.75 percent	2.75 percent	2.75 percent
3.75 percent	3.75 percent	3.75 percent
7.75 percent	8.00 percent	8.00 percent

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**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,<sup>1</sup>**  
(amounts in millions)

	2023	2022	2021	2020	2019	2018	2017
<b>Total OPEB Liability<sup>2</sup></b>							
Service Cost	\$ 1.5	\$ 1.9	\$ 2.0	\$ 2.3	\$ 2.5	\$ 3.1	\$ 3.4
Interest on Total OPEB Liability	24.9	27.3	28.3	30.3	32.4	34.2	33.8
Changes in Benefit Terms	—	—	—	—	—	—	—
Changes in Assumptions	—	(19.7)	10.7	(16.5)	—	(0.5)	—
Differences Between Expected and Actual Experience	(11.6)	(13.0)	(7.1)	(13.0)	(32.3)	(9.1)	—
Benefit Payments	(29.8)	(30.6)	(31.3)	(31.8)	(32.2)	(32.5)	(31.2)
<b>Net Change in Total OPEB Liability</b>	<b>(15.0)</b>	<b>(34.1)</b>	<b>2.6</b>	<b>(28.7)</b>	<b>(29.6)</b>	<b>(4.8)</b>	<b>6.0</b>
<b>Total OPEB Liability - Beginning</b>	<b>375.4</b>	<b>409.5</b>	<b>406.9</b>	<b>435.6</b>	<b>465.2</b>	<b>470.0</b>	<b>464.0</b>
<b>Total OPEB Liability - Ending</b>	<b>\$ 360.4</b>	<b>\$ 375.4</b>	<b>\$ 409.5</b>	<b>\$ 406.9</b>	<b>\$ 435.6</b>	<b>\$ 465.2</b>	<b>\$ 470.0</b>
<b>Plan Fiduciary Net Position</b>							
Employer Contributions	\$ 2.1	\$ 2.5	\$ 3.0	\$ 6.3	\$ 49.6	\$ 48.0	\$ 49.8
Net Investment and Other Income	25.2	7.5	171.8	8.6	36.0	50.9	57.6
Benefit Payments	(29.8)	(30.6)	(31.3)	(31.8)	(32.2)	(32.6)	(31.2)
Administrative Expense	(1.6)	(1.6)	(1.3)	(1.3)	(1.3)	(1.3)	(1.3)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>(4.1)</b>	<b>(22.2)</b>	<b>142.2</b>	<b>(18.2)</b>	<b>52.1</b>	<b>65.0</b>	<b>74.9</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>730.7</b>	<b>752.9</b>	<b>610.7</b>	<b>628.9</b>	<b>576.8</b>	<b>511.8</b>	<b>436.9</b>
<b>Plan Fiduciary Net Position - Ending</b>	<b>\$ 726.6</b>	<b>\$ 730.7</b>	<b>\$ 752.9</b>	<b>\$ 610.7</b>	<b>\$ 628.9</b>	<b>\$ 576.8</b>	<b>\$ 511.8</b>
<b>Net OPEB (Asset)</b>	<b>\$ (366.2)</b>	<b>\$ (355.3)</b>	<b>\$ (343.4)</b>	<b>\$ (203.8)</b>	<b>\$ (193.3)</b>	<b>\$ (111.6)</b>	<b>\$ (41.8)</b>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	201.6 %	194.6 %	183.9 %	150.1 %	144.4 %	124.0 %	108.9 %
Covered Payroll	\$ 3,770.8	\$ 3,792.8	\$ 3,929.8	\$ 3,955.6	\$ 4,023.3	\$ 4,303.2	\$ 4,570.1
Net OPEB (Asset) as a Percentage of Covered Payroll	(9.71) %	(9.37) %	(8.74) %	(5.15) %	(4.80) %	(2.59) %	(0.91) %

<sup>1</sup> 10-year trend information will be disclosed prospectively

<sup>2</sup> 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<sup>1</sup>**

	2023	2022	2021	2020	2019	2018	2017
Annual Money-Weighted Rate of Return Net of Investment Expense	3.1%	6.5%	26.3%	0.6%	6.7%	9.7%	12.5%

<sup>1</sup> 10-year trend information will be disclosed prospectively.

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

	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
<b>Total OPEB Liability<sup>2</sup></b>							
Service Cost	\$ 0.9	\$ 1.2	\$ 1.3	\$ 1.4	\$ 1.5	\$ 1.5	\$ 1.5
Interest on Total OPEB Liability	3.3	4.3	4.5	5.1	5.0	5.2	5.0
Changes in Benefit Terms	—	—	—	—	—	—	—
Changes in Assumptions	—	(11.4)	1.1	(7.9)	—	0.4	—
Differences Between Expected and Actual Experience	(3.0)	(4.5)	(4.6)	(2.2)	(0.3)	(3.0)	—
Benefit Payments	(3.0)	(3.4)	(3.7)	(4.1)	(4.5)	(4.7)	(4.3)
<b>Net Change in Total OPEB Liability</b>	<b>(1.8)</b>	<b>(13.8)</b>	<b>(1.4)</b>	<b>(7.7)</b>	<b>1.7</b>	<b>(0.6)</b>	<b>2.2</b>
<b>Total OPEB Liability - Beginning</b>	<b>49.1</b>	<b>62.9</b>	<b>64.3</b>	<b>72.0</b>	<b>70.3</b>	<b>70.9</b>	<b>68.7</b>
<b>Total OPEB Liability - Ending</b>	<b>\$ 47.3</b>	<b>\$ 49.1</b>	<b>\$ 62.9</b>	<b>\$ 64.3</b>	<b>\$ 72.0</b>	<b>\$ 70.3</b>	<b>\$ 70.9</b>
<b>Plan Fiduciary Net Position</b>							
Employer Contributions	\$ 8.8	\$ 8.3	\$ 11.8	\$ 11.2	\$ 14.0	\$ 13.3	\$ 11.9
Net Investment and Other Income	3.0	0.8	16.3	0.8	2.5	2.4	2.0
Benefit Payments	(3.0)	(3.4)	(3.7)	(4.1)	(4.5)	(4.7)	(4.3)
Administrative Expense	(0.7)	(0.7)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)
<b>Net Change in Plan Fiduciary Net Position</b>	<b>8.1</b>	<b>4.9</b>	<b>24.1</b>	<b>7.6</b>	<b>11.7</b>	<b>10.7</b>	<b>9.3</b>
<b>Plan Fiduciary Net Position - Beginning</b>	<b>83.3</b>	<b>78.4</b>	<b>54.3</b>	<b>46.7</b>	<b>35.0</b>	<b>24.3</b>	<b>15.0</b>
<b>Plan Fiduciary Net Position - Ending</b>	<b>\$ 91.4</b>	<b>\$ 83.3</b>	<b>\$ 78.4</b>	<b>\$ 54.3</b>	<b>\$ 46.7</b>	<b>\$ 35.0</b>	<b>\$ 24.3</b>
<b>Net OPEB Liability/(Asset)</b>	<b>\$ (44.1)</b>	<b>\$ (34.2)</b>	<b>\$ (15.5)</b>	<b>\$ 10.0</b>	<b>\$ 25.3</b>	<b>\$ 35.3</b>	<b>\$ 46.6</b>
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	193.2 %	169.7 %	124.6 %	84.5 %	64.9 %	49.8 %	34.3 %
Covered Payroll	\$ 1,153.1	\$ 1,125.8	\$ 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	(3.83) %	(3.04) %	(1.34) %	0.86 %	2.26 %	3.03 %	3.51 %

<sup>1</sup> 10-year trend information will be disclosed prospectively

<sup>2</sup> 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<sup>1</sup>**

	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
Annual Money-Weighted Rate of Return Net of Investment Expense	3.7%	6.8%	26.6%	1.0%	7.6%	10.2%	14.3%

<sup>1</sup> 10-year trend information will be disclosed prospectively

**Required Supplementary Information**

**Schedule of OPEB RHIA Employer Contributions<sup>1</sup> (Unaudited)**

**Last 10 Fiscal Years**

(Dollar amounts in thousands)

	2023	2022	2021	2020	2019
Actuarially determined contributions <sup>1</sup>	\$ 2,139	\$ 2,458	\$ 2,963	\$ 6,360	\$ 49,615
Contributions in relation to the actuarially determined contributions	2,139	2,458	2,963	6,360	49,615
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 14,455,011	\$ 12,942,642	\$ 12,235,510	\$ 11,574,796	\$ 10,716,707
Contributions as a percentage of covered payroll	0.01%	0.02%	0.02%	0.05%	0.46%

**Note:**

<sup>1</sup> For Actuarial Assumptions and Methods, see table below.

**Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions**

Actuarial Valuation:	December 31, 2019	December 31, 2017	December 31, 2015
Effective:	July 2021 - June 2023	July 2019 - June 2021	July 2017 - June 2019
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	10 years	20 years
Actuarial assumptions:			
Inflation rate	2.40 percent	2.50 percent	2.50 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	3.40 percent	3.50 percent	3.50 percent
Investment rate of return	6.90 percent	7.20 percent	7.50 percent

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2018	2017	2016	2015	2014
\$ 47,998	\$ 49,786	\$ 44,588	\$ 53,648	\$ 48,253
47,998	49,786	44,588	53,648	48,253
\$ -	\$ -	\$ -	\$ -	\$ -
\$ 10,044,005	\$ 10,037,542	\$ 9,428,447	\$ 9,000,246	\$ 8,686,772
0.48%	0.50%	0.47%	0.60%	0.56%

December 31, 2013	December 31, 2011	December 31, 2009
July 2015 - June 2017	July 2013 - June 2015	July 2011 - June 2013
Entry Age Normal	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	10 years
Market value	Market value	Market value
20 years	N/A	N/A
2.75 percent	2.75 percent	2.75 percent
None. Statute stipulates \$60 monthly payment for healthcare insurance.	None. Statute stipulates \$60 monthly payment for healthcare insurance.	None. Statute stipulates \$60 monthly payment for healthcare insurance.
3.75 percent	3.75 percent	3.75 percent
7.75 percent	8.00 percent	8.00 percent

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**Required Supplementary Information**  
**Schedule of OPEB RHIPA Employer Contributions<sup>1</sup> (Unaudited)**  
**Last 10 Fiscal Years**  
**(Dollar amounts in thousands)**

	<b>2023</b>	<b>2022</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>
Actuarially determined contributions <sup>1</sup>	\$ 8,783	\$ 8,265	\$ 11,724	\$ 11,242	\$ 14,009
Contributions in relation to the actuarially determined contributions	8,783	8,265	11,724	11,242	14,009
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Covered payroll	\$ 4,649,973	\$ 4,013,100	\$ 3,794,773	\$ 3,555,791	\$ 3,118,065
Contributions as a percentage of covered payroll	0.19%	0.21%	0.31%	0.32%	0.45%

**Note:**

<sup>1</sup> For Actuarial Assumptions and Methods, see table below.

<b>Actuarial Assumptions and Methods Used to Set the Actuarially Determined Contributions</b>			
<b>Actuarial Valuation:</b>	<b>December 31, 2019</b>	<b>December 31, 2017</b>	<b>December 31, 2015</b>
Effective:	July 2021 - June 2023	July 2019 - June 2021	July 2017 - June 2019
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	10 years	20 years
Actuarial assumptions:			
Inflation rate	2.40 percent	2.50 percent	2.50 percent
Healthcare cost trend rates	change to: Graded from 7.1 percent in 2019 to 4.0 percent in 2074.	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.
Projected salary increases	3.40 percent	3.50 percent	3.50 percent
Investment rate of return	6.90 percent	7.20 percent	7.50 percent

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2018	2017	2016	2015	2014
\$ 13,290	\$ 11,864	\$ 10,967	\$ 6,887	\$ 6,150
13,290	11,864	10,967	6,887	6,150
\$ -	\$ -	\$ -	\$ -	\$ -
\$ 2,952,776	\$ 3,024,383	\$ 2,850,753	\$ 2,737,792	\$ 2,566,555
0.45%	0.39%	0.38%	0.25%	0.24%

December 31, 2013	December 31, 2011	December 31, 2009
July 2015 - June 2017 Entry Age Normal	July 2013 - June 2015 Projected Unit Credit	July 2011 - June 2013 Projected Unit Credit
Level percentage of payroll, closed	Level percentage of payroll, closed	Level percentage of payroll, closed
10 years	10 years	10 years
Market value	Market value	Market value
20 years	N/A	N/A
2.75 percent	2.75 percent	2.75 percent
Graded from 6.1 percent in 2014 to 4.7 percent in 2083.	Graded from 6.9 percent in 2012 to 4.5 percent in 2029	Graded from 7.0 percent in 2010 to 4.5 percent in 2029
3.75 percent	3.75 percent	3.75 percent
7.75 percent	8.00 percent	8.00 percent

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

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1. Net earned required contribution and investment revenues	\$ 198.85	\$ 226.61	\$ 197.92	\$ 157.55	\$ 176.38	\$ 111.68	\$ 32.49	\$ 31.27	\$ 28.91	\$ 31.39
2. Unallocated expenses	29.00	32.09	26.30	16.55	16.11	11.36	4.98	4.43	4.19	5.19
3. Estimated incurred claims and expense, end of policy year	175.41	212.21	179.01	133.10	142.94	83.24	18.27	25.94	31.05	28.15
4. Paid (cumulative) as of:										
End of policy year	175.01	211.90	184.61	133.60	142.44	91.57	18.50	25.74	31.04	28.12
One year later	192.78	226.61	200.50	151.25	149.18	98.32	25.05	26.53	31.83	
Two years later	192.81	226.61	200.50	151.78	156.07	98.31	25.05	26.53		
Three years later	192.81	226.61	200.49	151.75	156.05	98.31	25.05			
Four years later	192.81	226.60	200.48	151.75	156.05	98.31				
Five years later	192.81	226.60	200.48	151.75	156.05					
Six years later	192.81	226.60	200.48	151.75						
Seven years later	192.81	226.60	200.48							
Eight years later	192.81	226.60								
Nine years later	192.81									
5. Reestimated incurred claims and expense:										
End of policy year	175.41	212.21	179.01	133.10	142.94	83.24	18.27	25.94	31.05	28.15
One year later	193.18	226.92	194.90	151.25	149.68	89.98	24.81	26.73	31.85	
Two years later	193.21	226.92	194.91	151.28	156.57	89.97	24.81	26.73		
Three years later	193.21	226.91	194.90	151.25	156.55	89.97	24.82			
Four years later	193.22	226.91	194.88	151.25	156.55	89.97				
Five years later	193.21	226.90	194.88	151.25	156.55					
Six years later	193.21	226.90	194.88	151.25						
Seven years later	193.21	226.90	194.88							
Eight years later	193.21	226.90								
Nine years later	193.21									
6. Increase in estimated incurred claims and expense from end of policy year:	17.80	14.69	15.87	18.15	13.61	6.73	6.55	0.79	0.80	

**Other Supplementary Information**

**Other Supplementary Information**  
**Schedule of Plan Net Position**  
**Defined Benefit Pension Plan**  
**As of June 30, 2023**

	<b>Regular Account</b>	<b>Employee Pension Stability Account PERS 238/Regular (Tier One/Tier Two)</b>	<b>Oregon Public Service Retirement Plan Pension Program</b>
<b>Assets:</b>			
Cash and Cash Equivalents	\$ 1,755,719,333	\$ 8,465,420	\$ 336,149,271
Receivables:			
Employer	78,523,971	-	38,151,050
Interest and Dividends	214,807,652	854,873	35,429,040
Investment Sales and Other Receivables	2,682,187,351	10,622,933	440,556,719
Transitional Liability	243,198,241	-	-
Total Receivables	<u>3,218,717,215</u>	<u>11,477,806</u>	<u>514,136,809</u>
Interaccount Receivables and Payables	17,776,445	-	(16,499,270)
Due from Other Funds	43,043,051	(19,963,851)	-
Investments:			
Debt Securities	13,670,588,519	54,405,010	2,254,741,960
Public Equity	14,235,578,293	56,653,507	2,347,927,864
Real Estate and Real Estate Investment Trusts	10,230,560,327	40,714,687	1,687,365,076
Private Equity	19,872,921,022	79,088,509	3,277,716,159
Real Assets	6,814,795,462	27,120,925	1,123,990,035
Diversifying Strategies	3,732,716,358	14,855,137	615,651,052
Opportunity Portfolio	1,858,665,588	7,396,954	306,556,758
Total Investments	<u>70,415,825,569</u>	<u>280,234,729</u>	<u>11,613,948,904</u>
Securities Lending Collateral	461,229,585	1,836,157	76,091,035
Prepaid Expenses	5,079,898	15,524	643,352
Capital Assets at Cost, Net	16,915,284	-	1,079,280
<b>Total Assets</b>	<b><u>75,934,306,380</u></b>	<b><u>282,065,785</u></b>	<b><u>12,525,549,381</u></b>
<b>Liabilities:</b>			
Investment Purchases and Accrued Expenses	4,442,601,964	15,679,852	650,620,895
Deposits and Other Liabilities	66,999,353	-	1,942,653
Due to Other Funds	1,449,646	4,351,395	117,130
Leases Payable	36,380	-	-
Securities Lending Collateral Due Borrowers	461,215,290	1,836,100	76,088,678
<b>Total Liabilities</b>	<b><u>4,972,302,633</u></b>	<b><u>21,867,347</u></b>	<b><u>728,769,356</u></b>
<b>Net Position Restricted for Pension Benefits</b>	<b><u>\$ 70,962,003,747</u></b>	<b><u>\$ 260,198,438</u></b>	<b><u>\$ 11,796,780,025</u></b>

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Employee Pension Stability Account OPSRP Program		Variable Account	Total
\$	6,546,353	\$ 7,238,629	\$ 2,114,119,006
	–	–	116,675,021
	633,417	–	251,724,982
	7,871,050	–	3,141,238,053
	–	–	243,198,241
	<u>8,504,467</u>	<u>–</u>	<u>3,752,836,297</u>
	–	(1,277,175)	–
	8,760,306	–	31,839,506
	40,311,330	–	16,020,046,819
	41,977,351	245,220,980	16,927,357,995
	30,167,501	–	11,988,807,591
	58,600,540	–	23,288,326,230
	20,095,219	–	7,986,001,641
	11,006,897	–	4,374,229,444
	5,480,765	–	2,178,100,065
	<u>207,639,603</u>	<u>245,220,980</u>	<u>82,762,869,785</u>
	1,360,543	1,588	540,518,908
	11,502	–	5,750,276
	–	–	17,994,564
	<u>232,822,774</u>	<u>251,184,022</u>	<u>89,225,928,342</u>
	11,617,969	2,309,818	5,122,830,498
	–	1,569	68,943,575
	79,495	–	5,997,666
	–	–	36,380
	1,360,501	1,588	540,502,157
	<u>13,057,965</u>	<u>2,312,975</u>	<u>5,738,310,276</u>
\$	<u>219,764,809</u>	\$ <u>248,871,047</u>	\$ <u>83,487,618,066</u>

Continued from the previous page.

**Other Supplementary Information**  
**Schedule of Changes in Plan Net Position**  
**Defined Benefit Pension Plan**  
**For the Fiscal Year Ended June 30, 2023**

	<b>Regular Account</b>	<b>Employee Pension Stability Account PERS 238/Regular (Tier One/Tier Two)</b>	<b>Oregon Public Service Retirement Plan Pension Program</b>
<b>Additions:</b>			
Contributions:			
Employer	\$ 1,264,588,681	\$ —	\$ 1,128,373,791
Plan Member	8,485,558	84,625,578	—
Total Contributions	<u>1,273,074,239</u>	<u>84,625,578</u>	<u>1,128,373,791</u>
Investment Income:			
Net Appreciation			
in Fair Value of Investments	1,656,557,123	4,753,574	245,073,191
Interest, Dividends and Other Investment Income	1,712,619,086	6,941,180	281,971,297
Total Investment Income	<u>3,369,176,209</u>	<u>11,694,754</u>	<u>527,044,488</u>
Less Investment Expense	<u>(900,792,455)</u>	<u>(3,612,763)</u>	<u>(148,785,582)</u>
Net Investment Income	2,468,383,754	8,081,991	378,258,906
Securities Lending Income:			
Securities Lending Income	16,892,484	56,482	2,604,608
Less Securities Lending Expense	<u>(14,609,935)</u>	<u>(48,898)</u>	<u>(2,253,514)</u>
Net Securities Lending Income	2,282,549	7,584	351,094
Other Income	<u>374,770</u>	<u>264</u>	<u>45,484</u>
<b>Total Additions</b>	<u>3,744,115,312</u>	<u>92,715,417</u>	<u>1,507,029,275</u>
<b>Deductions</b>			
Benefits	5,534,432,855	—	96,837,109
Death Benefits	4,090,901	—	—
Refunds of Contributions	10,084,306	—	—
Administrative Expense	52,770,608	264	13,085,257
Interaccount Transfers	<u>(60,907,071)</u>	<u>19,477,654</u>	<u>(1,806,410)</u>
<b>Total Deductions</b>	<u>5,540,471,599</u>	<u>19,477,918</u>	<u>108,115,956</u>
<b>Net Increase/(Decrease)</b>	(1,796,356,287)	73,237,499	1,398,913,319
<b>Net Position Restricted for Pension Benefits</b>			
<b>Beginning of Year [Restated]</b>	72,758,360,034	186,960,939	10,397,866,706
<b>End of Year</b>	<u>\$ 70,962,003,747</u>	<u>\$ 260,198,438</u>	<u>\$ 11,796,780,025</u>

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Employee Pension Stability Account OPSRP Program	Variable Account	Total
\$ -	\$ -	\$ 2,392,962,472
74,205,850	156,339	167,473,325
<u>74,205,850</u>	<u>156,339</u>	<u>2,560,435,797</u>
2,997,532	39,070,787	1,948,452,207
5,489,760	63,884	2,007,085,207
<u>8,487,292</u>	<u>39,134,671</u>	<u>3,955,537,414</u>
(2,855,464)	(227,299)	(1,056,273,563)
<u>5,631,828</u>	<u>38,907,372</u>	<u>2,899,263,851</u>
41,289	118	19,594,981
(35,751)	(118)	(16,948,216)
<u>5,538</u>	<u>-</u>	<u>2,646,765</u>
264	1,756,317	2,177,099
<u>79,843,480</u>	<u>40,820,028</u>	<u>5,464,523,512</u>
-	33,269,917	5,664,539,881
-	-	4,090,901
-	88,192	10,172,498
264	1,798,627	67,655,020
<u>1,806,410</u>	<u>41,429,417</u>	<u>-</u>
<u>1,806,674</u>	<u>76,586,153</u>	<u>5,746,458,300</u>
78,036,806	(35,766,125)	(281,934,788)
141,728,003	284,637,172	83,769,552,854
<u>\$ 219,764,809</u>	<u>\$ 248,871,047</u>	<u>\$ 83,487,618,066</u>

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**Other Supplementary Information**  
**Schedule of Administrative Expenses - All Funds**  
**For the Fiscal Year Ended June 30, 2023**

**Personal Services:**

Staff Salaries	\$ 31,078,373
Social Security	7,373,901
Retirement	2,373,166
Unemployment Compensation	1,494
Workers' Compensation	7,690
Insurance	7,319,992
Assessments	269,281
Total Personal Services	48,423,897

**Professional Services:**

Actuarial	589,519
Data Processing	56,054
Legal Counsel	381,005
Medical Consultants	517,000
Training and Recruitment	278,049
Contract Services	13,063,007
Healthcare Fees	4,460,209
Total Professional Services	19,344,843

**Communications:**

Printing	170,329
Telephone	441,037
Postage	708,094
Travel	138,544
Total Communication	1,458,004

**Rentals:**

Office Space	237,690
Total Rentals	237,690

**Miscellaneous:**

Central Government Charges	15,729,695
Supplies	1,474,265
Maintenance	480,910
Non-Capitalized Equipment	1,579,935
Depreciation and Amortization	3,106,715
Other Interest Expenses	807
Other Expenses	(450,968)
Total Miscellaneous	21,921,359

<b>Total Administrative Expenses:</b>	<b>\$ 91,385,790</b>
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**Other Supplementary Information**  
**Schedule of Payments to Consultants and Contractors**  
**For the Fiscal Year Ended June 30, 2023**

<b>Individual or Firm</b>	<b>Fees Paid</b>	<b>Nature of Service</b>
ACCURATE CORPORATE SERVICES INC	\$ 2,671	Contractual
ADT COMMERCIAL	9,123	Contractual
BAY VIEW BUILDING MAINTENANCE INC	2,400	Contractual
BENEFITHELP SOLUTIONS	3,155,866	Health Insurance
CANTEL SWEEPING	900	Contractual
CASCADE CENTERS INC	13,349	Contractual
CBIZ RISK & ADVISORY SERVICES LLC	63,450	Contractual
CDW	100,511	Contractual
CEDAR MILL CONSTRUCTION COMPANY LLC	8,970	Contractual
CEM-COST EFFECTIVENESS MEASUREMENT INC	50,000	Benchmarking
CITISTREET	2,930,555	Contractual
COAST SWEEPING SERVICE INC	38,860	Contractual
DEPARTMENT OF ADMINISTRATIVE SERVICES	503,432	Contractual
DEPARTMENT OF CONSUMER & BUSINESS SERVICE	562	Contractual
DEPARTMENT OF JUSTICE	289,870	Legal
DEPAUL INDUSTRIES	16,387	Contractual
EC COMPANY	1,567	Contractual
EMPLOYMENT DEPARTMENT	90,146	Contractual
FIRST RESPONSE	8,620	Contractual
FISHNET SECURITY INC	99,338	Technology
FREDRICK WILLIAM MILLER MD	71,500	Medical
GABRIEL ROEDER SMITH & COMPANY	49,250	Actuarial
GARTNER GROUP INC	658,350	Technology
ICE MILLER	989	Legal
IES COMMERCIAL INC	3,834	Contractual
IMAGE ACCESS CORP	4,800	Contractual
INDEPENDENT ACTUARIES INC	72,000	Actuarial
INDUSTRIAL SOURCE	505	Contractual
J H KELLY LLC	1,028	Contractual
KONE INC	2,808	Contractual
LANCESOFT INC	8,740,088	Technology
LANDCARE	68,383	Contractual
LANGUAGE LINE SOLUTIONS INC	1,499	Contractual
LEGISLATIVE COUNSEL COMMITTEE	2,711	Contractual
LEXISNEXIS RISK DATA MANAGMENT INC	8,677	Technology
MACIAS GINI & O'CONNELL LLP	54,015	Audit
MILLIMAN INC	523,994	Actuarial
NATIONAL INTERPRETING SERVICE INC	5,700	Contractual
OREGON DENTAL SERVICE	2,126,699	Contractual
OREGON MEDICAL EVALUATIONS INC	2,600	Contractual
OREGON UNIONS STATE WORKER	16,680	Contractual
PACIFIC OFFICE AUTOMATION INC	44,882	Contractual
PACIFIC REALTY ASSOCIATES LP	362,555	Contractual
PREMIER CLEANING	1,360	Contractual
PROPOSAL TECHNOLOGIES NETWORK INC	6,850	Contractual
PROTEMP	15,584	Contractual
RAY KLEIN INC	150	Contractual
THE SEGAL COMPANY	517,000	Contractual
TVW INC	143,939	Contractual
VOYA HOLDINGS INC	460,792	IAP Administration
WAGONER GROUP INC	360	Contractual
WEST COAST PLANT CO INC	2,669	Contractual
	<u>\$ 21,358,828</u>	

**Other Supplementary Information**  
**Summary of Investment Fees, Commissions, and Expenses**  
**For the Fiscal Year Ended June 30, 2023**

	<u>2023</u>		<u>2023</u>
<b><u>Debt Securities Managers</u></b>		<b><u>Real Estate Portfolio Managers (continued)</u></b>	
Ashmore Investment Management	\$ 443,876	Harrison Street Core Property Fund Co-Investment	\$ 508,750
Beach Point Capital Management LP	561,278	Harrison Street Real Estate Core Property	1,737,308
Blackrock Financial Management	1,609,088	Harrison Street Real Estate Partners IX	1,687,500
Fidelity Institutional Asset Management	645,010	Harrison Street Real Estate Partners V-A	546,675
Global Evolution	394,202	Harrison Street REP V Co-Investment	158,821
Guggenheim Partners	2,099,520	Harrison Street REP VIII	1,875,000
KKR Asset Management	160,846	Harrison Street US SA V (Non-Core Account)	562,079
Morgan Stanley Investment Management	574,983	Heitman America Real Estate Trust, LP	1,404,851
Oak Hill Advisors	6,176,552	Heritage Fields Capital	287,223
PGIM Fixed Income	415,542	IL & FS India Realty Fund	141,835
PIMCO	769,162	IL & FS India Realty Fund II	121,245
Putnam Investments	1,059,298	JPMCB Strategic Property Fund	2,548,049
Schroder Investment Management	1,603,107	Landmark Real Estate Partners VII, LP	177,256
Wellington Management Company	1,061,043	LBA Core Industrial	3,520,137
Western Asset Management Company	1,253,478	LBA Logistics Value Fund IX	2,250,000
<b><u>Domestic Equity Fund Managers</u></b>		Lincoln CIP - Value Add	149,088
AQR Capital Management, LLC	156,714	Lincoln CIP Industrial Core	6,636,913
Dimensional Fund Advisors LTD	2,029,014	Lincoln Non Mandate	596,812
Eudaimonia Asset Management	1,148,271	Lion Mexico Fund	167,408
Newton Investment	1,061,889	Lionstone One Value Add	2,605,043
<b><u>International Equity Fund Managers</u></b>		Lone Star Fund IX	117,966
Acadian Asset Management	3,143,744	Lone Star Fund VIII	45,654
Adrian Lee & Partners	1,300,000	Lone Star Real Estate Fund IV	217,168
AHL Partners LLP	2,045,813	Lone Star Real Estate Fund V	217,980
Alliance Bernstein International	731,665	LORE One, L.P. (Core)	6,049,038
AQR Capital Management, LLC	1,790,008	Madison Realty Capital Debt Fund III, LP	1,098,802
Arrowstreet Capital, LP	11,494,503	Morgan Stanley Prime Property Fund	3,334,342
Aspect Capital Limited	1,060,555	Nuveen U.S. Cities Industrial Fund	1,057,833
Brandes Investment Partners LP	1,607,635	Nuveen U.S. Cities Multifamily Fund	528,917
Cantillon Capital Management LLC	1,014,212	Oak Street Real Estate Capital Fund V	1,449,994
Dimensional Fund Advisors LTD	1,178,076	Oak Street Real Estate Capital Fund VI	62,230
EAM Investors, LLC	676,379	Och Ziff RE III (Sculptor 3)	195,920
Genesis Asset Managers	807,566	Oregon Abacus Multifamily Associates LP	2,891,391
Harris Associates	1,577,924	Prologis Targeted Europe Logistics Fund	2,285,080
Lazard Asset Management	3,310,485	Prologis Targeted US Logistic Fund	4,248,598
Los Angeles Capital Management	2,107,550	Regency Core	1,187,440
OPERF Intl Transition Fund / State Street Bank	84,369	Regency II	1,537,280
Pangora Asset Management	1,107,345	Rockpoint Growth and Income Fund I, LP	637,582
PE Global	1,800,000	Rockpoint Real Estate Fund IV	43,379
Walter Scott Management	2,277,555	RREEF America REIT II	1,149,349
Westwood Global Investments	681,583	Sculptor Diversified Real Estate Income Trust	379,923
William Blair & Company	1,289,403	Sculptor RE IV	1,312,500
<b><u>Real Estate Portfolio Managers</u></b>		Starwood Cap Hospitality Fd II Global LP	64,001
Abacus Multi-Family Partners VI	1,995,873	Vornado Capital Partners L.P.	124,610
ABKB / Lasalle Advisors-Intl	956,975	Walton Street Real Estate Core-Plus Fund	1,301,648
Aetos Capital Asia III	11,884	Waterton Fund IX PT Chicago, LLC	582,000
Aetos Capital Asia TE II	33,051	Waterton Residential Property Venture XII	525,962
AEW Core Property Trust	700,862	Waterton Residential Property Venture XIV	1,500,000
AEW Essential Housing Fund	445,851	Waterton Residential Property XI	84,753
Ascentris - OR Partners LLC	5,144,390	Windsor Columbia Realty Fund	12,450,413
Ascentris Core	1,184,486	Windsor Columbia Realty Non-Core	389,899
Blackstone Real Estate Partners IX, LP	3,283,309	<b><u>Private Equity Portfolio Managers</u></b>	
Blackstone Real Estate Partners VII, LP	13,486	A&M Capital Partners	248,959
Blackstone Real Estate Partners X	2,487,319	A&M Capital Partners Europe	2,274,885
Brazil Real Estate Opportunities II	198,488	A&M Capital Partners II	1,909,829
Cameron Village	591,080	A&M Capital Partners III	3,000,000
Clarion	689,036	ACON Equity Partners IV	1,602,699
Clarion (Non Mandate)	321,036	Advent Global Technology	638,381
Clarion Columbia Office Property	4,428,543	Advent Global Technology II	1,500,000
Columbia Woodbourne Holdings, LLC	161,811	Advent International Global Private Equity VI A	127,645
DivcoWest Fund IV REIT, LP	28,103	Advent International Global Private Equity VII C	194,477
DivcoWest Fund V	2,006,329	Advent International Global Private Equity IX	1,183,930
DivcoWest Real Estate Fund VI	2,164,487	Advent International Global Private Equity X	2,989,252
DW-Columbia Perfco, LP	1,728,579	Advent Latin American Private Equity VI	930,838
GID Mainstay Fund	1,041,851	Advent Latin American Private Equity VII	3,000,001

**Other Supplementary Information**  
**Summary of Investment Fees, Commissions, and Expenses**  
**For the Fiscal Year Ended June 30, 2023**

	<u>2023</u>		<u>2023</u>
<b>Private Equity Portfolio Managers (continued)</b>		<b>Private Equity Portfolio Managers (continued)</b>	
Alpine Investors VIII	\$ 2,000,000	KKR Asian Fund III	\$ 1,910,634
APAX IX	2,099,129	KKR European Fund III	212,601
APAX VIII	534,641	KKR North America Fund XI	138,337
Apollo Investment Fund VIII	299,313	KKR North America Fund XII	4,024,430
Apollo Investment Fund IX	4,228,507	KKR North America Fund XIII	3,437,500
Aquiline Financial Services Fund IV	2,478,488	KPS Special Situations Fund V	625,000
Aquiline Financial Services Fund V	4,180,822	KSL Capital Partners Fund III	272,517
Aquiline Financial Services Fund III	736,516	KSL Capital Partners Fund IV	1,208,887
Arsenal Capital Partners Growth	1,447,864	KSL Capital Partners Fund V	1,551,843
Arsenal Capital Partners VI	3,000,000	Luminate Capital Partners Fund III	3,000,000
Blackstone Capital Partners VII	2,423,646	Mayfield Select	62,278
Blackstone Capital Partners VIII	6,250,000	Mayfield Select II	199,499
Blackstone Energy Partners II	1,188,043	Mayfield XIV	552,840
Bridgepoint Europe VI	2,437,288	Mayfield XV	691,299
Bridgepoint Europe VI (Sidecar)	136,954	Mayfield XVI	531,003
Capital International Private Equity Fund VI	370,602	MBK Partners Fund IV	2,101,686
CDH Fund V	819,764	MHR Institutional Partners IV	2,017,460
Centerbridge Capital Partners III	1,146,278	Novalpina Capital Fund I	81,894
Centerbridge Capital Partners IV	3,500,001	Oak Investments Partners XIII	149,105
Centerbridge Special Credit Partners III	606,033	Oaktree European Principal Fund III (US)	196,041
Centerbridge Special Credit Partners III - Flex	5,583,337	Oaktree Opportunities Fund VIIIb	37,058
Cinven VI Fund	1,114,897	Oaktree Opportunities Fund X	457,011
Cinven VII Fund	2,946,070	Oaktree Opportunities Fund Xb	1,360,000
Cinven VIII Fund	775,608	Oaktree Opportunities Fund IX	628,544
Clearlake Capital Partners VI	2,625,000	Oaktree Opportunities Fund XI	3,972,874
Clearlake Capital Partners VII	4,250,000	Odyssey Investment Partners Fund VI	3,000,000
Clearvue Partners III	2,400,000	OrbiMed Private Investments V	158,618
CVC Capital Partners Asia V	2,250,000	OrbiMed Private Investments VI	649,907
CVC Capital Partners VI (A)	1,086,712	Orchid Asia VII	4,182,644
CVC Capital Partners VII (A)	2,419,949	Palladium Equity Partners IV	667,978
CVC Capital Partners VIII	5,476,575	Palladium Equity Partners V	4,000,000
EnCap Energy Capital Fund X	803,690	Pathway Private Equity Fund III-B	1,009,440
EnCap Energy Capital Fund XI	3,261,709	Pathway Private Equity Fund III-CO	5,234,041
Francisco Partners Agility II	750,000	Permira VI	2,278,287
Francisco Partners III	43,392	Permira VII	2,570,307
Francisco Partners IV	1,022,937	Permira VIII	3,665,093
Francisco Partners V	2,069,588	Public Pension Capital	1,276,317
Francisco Partners VI	3,750,000	Rhône Partners V	1,966,365
General Atlantic Partners	10,529,500	Roark Capital Partners IV	952,322
Genstar Capital Partners VIII	1,086,505	Roark Capital Partners V	3,511,263
Genstar Capital Partners IX	1,569,539	Roark Capital Partners VI	4,375,000
Genstar Capital Partners X	2,450,000	RRJ Capital Master Fund II	88,574
Genstar VIII Opportunities Fund I	332,632	RRJ Capital Master Fund III	862,069
Genstar IX Opportunities Fund I	595,260	Sherpa Healthcare I	848,160
Genstar X Opportunities Fund I	395,189	Sherpa Healthcare II	1,125,000
GGV Capital Select	178,963	TA XIV	1,746,408
GGV Capital V	520,690	TDR Capital III	680,585
GGV Capital VI	622,402	TDR Capital IV	2,622,742
GGV Capital VII	1,043,627	TDR Capital V	2,193,515
GGV Capital VIII	1,440,000	TPG Partners IX	3,603,945
GGV Discovery II	352,555	Thoma Bravo Fund XIV	3,410,699
GGV Discovery III	600,000	Thoma Bravo Fund XV	3,750,000
GI Partners Fund IV	921,358	TPG Growth III (A)	1,283,526
GI Partners Fund V	2,923,138	TPG Growth IV	1,897,825
Granite Ventures II	88,836	TPG Growth V	3,718,753
Green Equity Investors VI	581,697	TPG Healthcare Partners	993,229
Green Equity Investors VII	1,390,981	TPG Healthcare Partners II	900,987
GTCR Fund XII	1,851,202	TPG Partners VII	1,345,136
GTCR Fund XIII	2,728,859	TPG Partners VIII	4,167,632
GTCR Strategic Growth Fund	929,356	TSG Consumer Partners 9	3,750,000
Hamilton Lane International SMID Fund	750,000	USV 2021	210,000
Hellman & Friedman Capital Partners VIII	545,996	USV Climate 2021	247,500
Hellman & Friedman Capital Partners IX	3,150,797	USV Climate 2022	176,168
Hellman & Friedman Capital Partners X	5,249,996	USV Opportunity 2019	243,750
KKR Asian Fund II	651,859	Veritas Capital Fund IV	26,579

**Other Supplementary Information**  
**Summary of Investment Fees, Commissions, and Expenses**  
**For the Fiscal Year Ended June 30, 2023**

	2023		2023
<b>Private Equity Portfolio Managers (continued)</b>		<b>Real Assets Portfolio Managers (continued)</b>	
Veritas Capital Fund V	\$ 1,261,380	Stonepeak Infrastructure Fund	\$ 557,476
Veritas Capital Fund VI	2,488,563	Stonepeak Infrastructure Fund II (AIV II Claremont)	625,000
Veritas Capital Fund VII	3,236,557	Stonepeak Infrastructure Fund II	789,101
Veritas Capital Fund VIII	5,465,753	Stonepeak Infrastructure Fund III	3,778,522
Vista Equity Partners Fund IV	617,418	Stonepeak Infrastructure Fund IV	4,642,856
Vista Equity Partners Fund V	1,705,996	Taurus Mining Finance Fund II	1,875,000
Vista Equity Partners Fund VI	5,670,530	Tillridge Global Agribusiness Partners II	1,208,166
Vista Equity Partners Fund VII	7,500,000	Twin Creeks Timber	690,777
Vista Equity Partners Fund VIII	1,470,995	Warwick Partners III	2,376,071
Vista Foundation Fund II	514,069	Warwick Partners IV	3,441,274
Vista Foundation Fund III	2,448,164	Westbourne Infrastructure Debt 6	648,117
Vitruvian Investment Partns IV	2,922,315		
<b>Real Assets Portfolio Managers</b>		<b>Diversifying Strategies Portfolio Managers</b>	
Alinda Infrastructure Fund II	6,255	AQR Multi-Strategy Fund X	3,901,701
Alterra Core Capital Assets Fund II	830,672	Aspect Core Trend HV Fund	4,987,819
Appian Natural Resources Fund	521,019	Blackrock Style Advantage	353,765
Appian Natural Resources Fund II	1,730,185	Brevan Howard	5,798,188
Appian Natural Resources Fund III	1,650,685	Bridgewater All Weather	1,165,907
Blackstone Energy Partners III	2,500,000	Bridgewater Optimal Portfolio	1,484,404
Brookfield Infrastructure Fund III B	3,163,790	Bridgewater Pure Alpha Major Markets II	3,535,576
Brookfield Infrastructure Fund IV	4,317,143	Caxton Global Investments (USA)	3,995,769
Brookfield Infrastructure Fund V	3,947,178	Davidson Kempner Institutional Partners	4,694,666
Brookfield Super-Core Infrastructure Partners	1,893,060	Dorsal Capital Partners	250,000
Brookfield Timberlands Fund V	27,389	Fort Global Trend Fund Series A 2020	1,771,784
Cube Infrastructure Fund III	2,196,247	GMO Systematic Global Macro	5,518,222
Digital Colony Partners	1,470,491	Hudson Bay Fund	6,383,018
EMR Capital Resources Fund II	1,947,027	Man AHL Alpha	4,237,501
EnCap Flatrock Midstream Fund III	466,349	Man AHL Alpha Core	112,071
EnCap Flatrock Midstream Fund IV	1,341,937	Marshall Wace Alpha Plus (US) Fund II	1,715,025
EnCap Flatrock Midstream Fund V	1,003,333	Reservoir Strategic Partners Fund	492,621
The Energy & Minerals Group Fund III	1,674,557		
EnerVest Energy Institutional Fund XIV	772,954	<b>Opportunity Portfolio Managers</b>	
EQT Infrastructure Fund III	907,460	Arctos Sports Partners Fund I	1,338,936
EQT Infrastructure Fund IV - USD Fund	3,621,024	Arctos Sports Partners Fund II	2,276,580
EQT Infrastructure Fund V	4,715,804	Blackstone Tactical Opportunity Fund	1,511,570
EQT Infrastructure V Co-Investment Fund	99,358	Blackstone Tactical Opportunity Fund II	234,276
GIP Aquarius Fund	375,000	Blue Torch Credit Opportunities Fund II	1,296,528
Global Infrastructure Partners Capital Solutions Fund	1,385,106	Clearlake Flagship Plus Partners	1,499,911
Global Infrastructure Partners II A1	849,314	Content Partners Fund 3	430,612
Global Infrastructure Partners III	4,208,477	Fidelity Real Estate Opportunistic Income Fund	980,401
Global Infrastructure Partners IV	5,199,999	Lone Star Fund X	77,291
Harrison Street SIF Co-Investment I	532,831	Nephila Juniper Catastrophe Fund	58,583
Harrison Street Social Infrastructure Fund	2,076,632	Nephila Palmetto Fund	13,446
Highstar Capital Fund IV	56,944	OHA Tactical Investment Fund	4,035,089
Homestead Capital USA Farmland Fund II	1,360,009	OrbiMed Royalty Opportunities Fund II	68,052
International Infrastructure Finance Company Fund	125,760	Pathlight Capital Fund II	1,250,000
LS Power Equity Partners IV	3,082,447	Pathlight Capital Fund III	1,274,306
LS Power Fund III Feeder 1	871,543	Sanders Capital All Asset Value Fund	3,750,754
NGP Agribusiness Follow-on Fund	648,405	Sixth Street Specialty Lending Europe II	541,789
NGP Natural Resources X	240,800	TPG Specialty Lending Europe I (US Feeder)	176,507
NGP Natural Resources XI	1,839,288	TSSP Adjacent Opportunities Partners	3,769,052
NGP Natural Resources XII	3,555,494	TSSP TAO Contingent	1,248,226
NGP Royalty Partners	933,418	Whitehorse Liquidity Partner IV	1,400,000
NGP Royalty Partners Fund II	1,143,700	Whitehorse Liquidity Partner V	1,401,225
Northern Shipping Fund III	152,243	<b>Russell Investments - Cash Overlay</b>	909,486
Northern Shipping Fund IV	2,250,000	<b>BlackRock - Variable Fund</b>	133,500
QL Capital Partners	1,912,414	<b>IAP Target Date Funds: Alliance Bernstein</b>	3,885,500
Quantum Energy Partners VIII	2,734,511	<b>IAP Target Date Funds: State Street Bank</b>	450,196
Sheridan Production Partners III-B	1,197,465	<b>Brokerage Commissions</b>	8,321,526
Silver Creek Aggregate Reserves Fund I	268,374	<b>Consulting and Subscription Fees</b>	12,762,315
Sprott Annex	205,908	<b>State Street Bank:</b>	
Sprott Private Resource Royal	793,885	Incentive Fee/Carried Interest	258,790,116
Starwood Energy Infrastructure Fund III	2,250,000	Foreign Income Taxes	15,102,534
Stonepeak Core Fund	1,097,363	Operating Expenses <sup>1</sup>	180,652,683
Stonepeak Global Renewables Fund	1,363,636	Other Expenses <sup>2</sup>	39,254,089
		<b>State Treasury Administrative Fees</b>	28,256,670
		<b>Deferred Compensation Investment Fees and Expenses</b>	6,220,874
		<b>Total Investment Fees, Commissions and Expenses</b>	<b>\$ 1,196,305,251</b>

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

<sup>2</sup>Expenses related to legal, travel, and other adjustments.



## Investment Section





**Tobias Read**  
Oregon State Treasurer

**Michael Kaplan**  
Deputy State Treasurer

October 15, 2023

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 \$136.6 billion as of June 30, 2023. This portfolio includes the Oregon Public Employee Retirement Fund (OPERF), which advanced 3.17% last fiscal year, totaled \$96.7 billion at June 30, 2023 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 risk factors, including, but not limited to, several asset classes and geographies. 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, real assets, and diversifying strategies. 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. 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.

With the high levels of inflation seemingly, albeit not completely, behind us, the MSCI ACWI IMI Net index was up 16.1%<sup>1</sup> during the fiscal year. And with this positive market return as backdrop, OPERF Regular Account produced a gain of 3.2%. As we have noted in the past, our highly diversified portfolio tends to lag when the equity markets are producing above average positive returns, but also tends to perform better relative to equity markets when risky assets are declining rapidly. This is due to the fact that OPERF has a mix of exposure to both stocks and bonds investments. The level of risk in OPERF is similar to that of a portfolio that is 70% in stocks and 30% in bonds; therefore, performing better in down markets and worse in up markets. Over a full market cycle, these characteristics, which highlight how we are different than a simple stocks only portfolio, evens itself out. Annualized net returns for the five- and ten-year periods ended June 30, 2023 were 8.1% and 8.3%, respectively. Over the same five- and ten-year periods, a portfolio simply in 70% stocks and

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<sup>1</sup> All performance figures cited throughout this letter are based on market values and time-weighted return calculations.



Investment Division  
16290 SW Upper Boones Ferry Road  
Tigard, OR 97224  
503.431.7900

Main Office  
867 Hawthorne Ave SE  
Salem, OR 97301  
503.378.4000

[oregon.gov/treasury](https://oregon.gov/treasury)  
[oregon.treasurer@state.or.us](mailto:oregon.treasurer@state.or.us)



**Tobias Read**  
Oregon State Treasurer

**Michael Kaplan**  
Deputy State Treasurer

30% bonds produced returns of 5.8% and 6.6%, respectively. That is to say, OPERF produced greater returns at a similar level of risk.

The U.S. stock market (as measured by the Russell 3000 index) generated a gain last fiscal year (FY 2023), of 18.9% over the 12-month period ended June 30, 2023. With a net gain of 16.2%, OPERF's U.S. public equity portfolio underperformed 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 2023, but our collection of managers who invest overseas produced significant outperformance relative to their opportunity set. OPERF managers investing abroad produced a collective 15.0% gain last fiscal year, better than the 12.5% 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 \$25.9 billion, OPERF's private equity investments represented 27.8% of total OPERF assets at June 30, 2023, and generated a net loss of 1.8% in FY 2023. At 13.9%, average annual returns over the previous 10-year period fell short of the 15.1% return for the benchmark, the Russell 3000 (lagged one quarter) plus 300 basis points. This relative underperformance is to be expected when the public equity markets are strongly rallying. This is in stark contrast to when the markets are falling, e.g. fiscal year 2022, when private equity performed quite a bit better. This short term break down in relationship with one another ebbs and flows, but trends back inline over longer time periods. All in all, regardless of public or private, we are making equity investments in businesses with the expectation that we will earn a rate of return that is consistent with the fundamental cashflows earned by each business.

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 2023, OPERF's real estate investments generated a 1.4% net loss, ahead the 3.9% loss 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 \$13.6 billion, and represented 14.6% of total OPERF assets. For the ten-year period ended June 30, 2023, OPERF's real estate portfolio delivered a net 9.7% on an average annual basis, ahead of the benchmark's 8.3% average annual return during that same period. The post-Covid realities for real estate investing still lingers, further exacerbated by the higher levels of interest rates for real estate loans. We continue to adjust this portfolio amongst property and security types.

The higher level of interest rates and inflation continued to prove a challenging environment for fixed income managers. Investments in fixed income securities comprised 22.9% of total OPERF assets at June 30, 2023, and produced a gain of 0.7% net return in FY 2023, but still beat the loss of 0.9% return recorded by OPERF's custom fixed income benchmark.

In 2021, the Oregon Investment Council officially adopted the separation of the "Alternatives" portfolio into its component parts of Real Assets and Diversifying Strategies. These two programs produced returns of 9.5% and 5.8%, respectively, for FY 2023. Both programs beat their respective benchmarks. The Real Assets



Investment Division  
16290 SW Upper Boones Ferry Road  
Tigard, OR 97224  
503.431.7900

Main Office  
867 Hawthorne Ave SE  
Salem, OR 97301  
503.378.4000

[oregon.gov/treasury](https://oregon.gov/treasury)  
[oregon.treasurer@state.or.us](mailto:oregon.treasurer@state.or.us)





**OREGON  
STATE  
TREASURY**

**Tobias Read**  
Oregon State Treasurer

**Michael Kaplan**  
Deputy State Treasurer

program is benchmarked to CPI+4%, which produced a gain of 7.1% for the fiscal year. The Diversifying Strategies benchmark is the HFRI: FoF Conservative Index, which was nearly flat for this period at 3.5% gain.

Sincerely,

Rex T. Kim

Chief Investment Officer



Investment Division  
16290 SW Upper Boones Ferry Road  
Tigard, OR 97224  
503.431.7900

Main Office  
867 Hawthorne Ave SE  
Salem, OR 97301  
503.378.4000

[oregon.gov/treasury](https://oregon.gov/treasury)  
[oregon.treasurer@state.or.us](mailto:oregon.treasurer@state.or.us)



## INVESTMENT OBJECTIVES

The function of PERS is to provide present and future retirement or survivor benefits for its members. The investment program for the Oregon Public Employees Retirement Fund (OPERF) — which includes PERS' Defined Benefit Pension 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 Oregon Investment Council (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, 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 nonvoting 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 make 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; it 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 Equity, Private Equity, Real Assets, and Diversifying Strategies. 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, 2023		
	1-Year	Annualized	
		3-Year	5-Year
Total Portfolio, Excluding Variable Account	3.17 %	11.26 %	8.08 %
OPERF Policy Benchmark <sup>1</sup>	3.73	9.35	7.54
Variable Account	16.42	11.29	7.97
Benchmark: MSCI All Country World Investable Market Index Net	16.14	10.97	7.65
Domestic Stocks	16.16	14.10	9.40
Benchmark: Russell 3000 Index	18.95	13.89	11.39
International Stocks	14.99	11.19	5.74
Benchmark: MSCI All Country World ex-US Investable Market Index Net	12.47	7.33	3.38
Fixed Income Segment	0.70	(2.48)	1.40
Benchmark: Oregon Custom Fixed Income Benchmark <sup>2</sup>	(0.94)	(3.58)	0.68
Real Estate	(1.38)	11.41	8.89
Benchmark: Oregon Custom Real Estate Benchmark <sup>3</sup>	(3.91)	7.46	6.56
Private Equity	(1.84)	20.68	15.36
Benchmark: Russell 3000 Index + 300 bps (Adj.) <sup>4</sup>	(5.81)	21.99	13.74
Real Assets	9.54	15.49	7.60
Benchmark: Consumer Price Index + 4%	7.08	9.99	8.04
Diversifying Strategies	5.83	10.15	1.56
Benchmark: HFRI FOF Conservative Index	3.47	6.01	3.89
Opportunity Portfolio	6.10	15.42	9.68
Benchmark: OPERF Policy Benchmark <sup>5</sup>	3.73	11.20	9.17

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

<sup>1</sup> From July 1, 2016 to March 31, 2018 the policy benchmark was 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 was 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 was 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 September 30, 2021 the policy benchmark was 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. From October 1, 2021 to March 31, 2023 the policy benchmark was 20% Russell 3000+300 Bps quarter lag, 20% BBG U.S. Aggregate, 12.50% NCRIF ODCE (Custom), 30% MSCI ACWI IMI Net, 7.50% CPI+4%, 7.50% HFRI FOF Conservative Index and 2.50 % S&P Risk Parity - 12% Target Volatility. From April 1, 2023 to Present, the policy benchmark is 20% Russell 3000+300Bps quarter lag, 25% BBG U.S. Aggregate, 12.50% NCRIF ODCE (Custom), 27.5% MSCI ACWI IMI Net, 7.50% CPI+4% and 7.50% HFRI FOF Conservative Index.

<sup>2</sup> From March 1, 2016 to September 30, 2021, index was 46% BBG Aggregate Bond, 37% BBG Treasury, 13% S&P LSTA and 4% BofA ML High Yield Master II. From October 1, 2021 to Present, index is 100% Bloomberg U.S. Aggregate.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> From September 1, 2006 to March 31, 2023, the policy benchmark was 100% CPI+5%. From April 1, 2023 to Present, benchmark is 100% OPERF policy benchmark. The 1-Year return of 3.73% represents the OPERF policy benchmark.

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

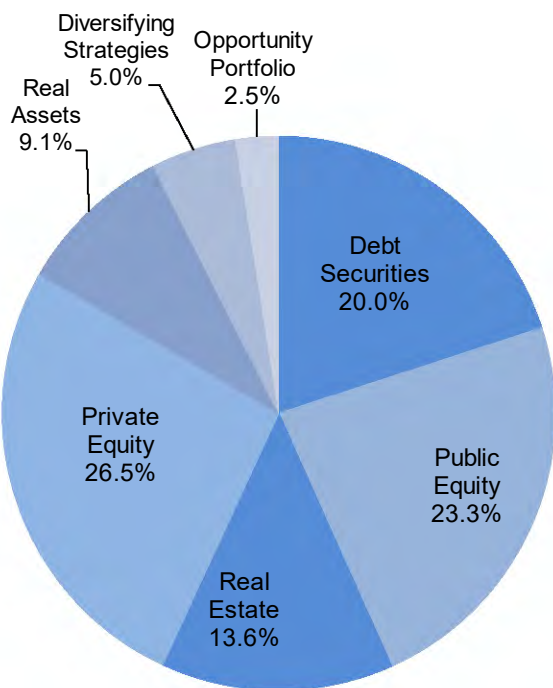
**OIC Target and Actual Investment Allocation as of June 30, 2023\***

Asset Class/Strategy	OIC Policy Range	OIC Target Allocation <sup>2</sup>	Asset Class/Strategy	Actual Allocation
Debt Securities	20.0 - 30.0 %	25.0 %	Debt Securities	20.0 %
Public Equity	22.5 - 32.5	27.5	Public Equity	23.3
Real Estate	9.0 - 16.5	12.5	Real Estate	13.6
Private Equity	17.5 - 27.5	20.0	Private Equity	26.5
Real Assets	2.5 - 10.0	7.5	Real Assets	9.1
Diversifying Strategies	2.5 - 10.0	7.5	Diversifying Strategies	5.0
Opportunity Portfolio <sup>1</sup>	0.0 - 5.0	0.0	Opportunity Portfolio	2.5
<b>Total</b>		<b>100.0 %</b>	<b>Total</b>	<b>100.0 %</b>

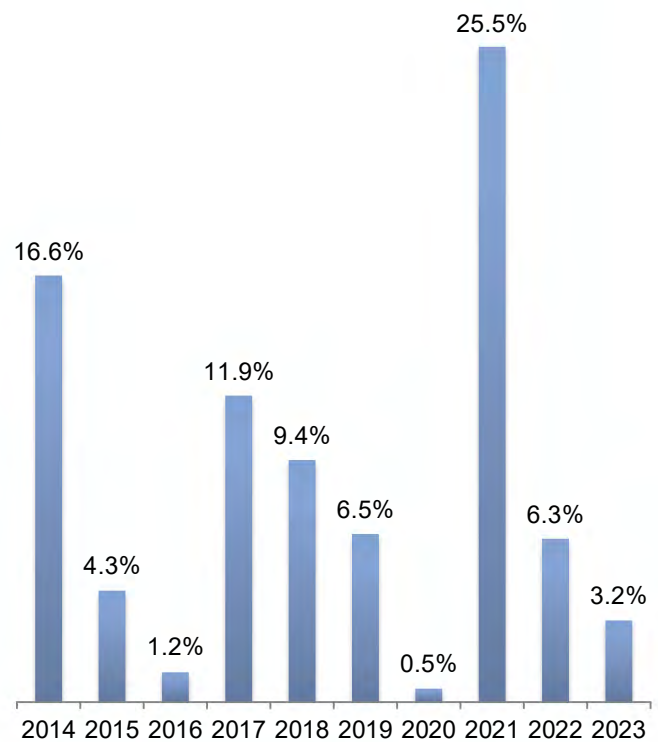
<sup>1</sup>Opportunity Portfolio is an investment strategy. Up to 5% of total Fund assets may be invested in it.

<sup>2</sup>The target allocation of Debt Securities is increased by 5% and Public Equity is reduced by 2.5% from FY2022, and the allocation to Risk Parity is eliminated.

**Investment Mix by Asset Class/Strategy**



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



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

## List of Largest Assets Held

### Largest Stock Holdings (by Fair Value) June 30, 2023

<u>Description</u>	<u>Shares</u>	<u>Fair Value</u>
Microsoft Corporation	1,413,328	\$ 481,294,717
Apple Inc.	2,462,939	477,736,278
NVIDIA Corporation	634,499	268,405,767
Meta Platforms, Inc. Class A	774,439	222,248,504
Broadcom Inc.	185,651	161,039,247
Amazon.com, Inc.	1,224,880	159,675,357
Alphabet Inc. Class A	1,237,974	148,185,488
Eli Lilly and Company	267,813	125,598,941
Cisco Systems, Inc.	2,368,807	122,562,074
Visa Inc. Class A	508,912	120,856,422

### Largest Bond Holdings (by Fair Value) June 30, 2023

<u>Description</u>	<u>Par Value</u>	<u>Fair Value</u>
U.S. Treasury Note 1.625% Due February 15, 2026	\$ 292,886,200	\$ 271,423,133
U.S. Treasury Note 2.250% Due November 15, 2025	211,200,000	199,534,499
FNMA TBA 30 Year Single Family Conventional 5% Issue August 2052	130,000,000	196,980,000
U.S. Treasury Note 0.750% Due January 31, 2028	210,180,000	180,295,031
U.S. Treasury Note 0.375% Due January 31, 2026	193,570,000	173,789,566
U.S. Treasury Note 2.750% Due August 15, 2032	179,975,000	164,993,487
U.S. Treasury Note 1.500% Due February 15, 2030	189,410,800	162,227,392
U.S. Treasury Note 1.375% Due January 31, 2025	154,620,000	145,819,948
U.S. Treasury Note 2.250% Due August 15, 2046	197,500,000	144,290,723
U.S. Treasury Note 0.500% Due March 31, 2025	154,000,000	142,450,000

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, 2023**

	<b>Assets Under Management</b>	<b>Fees</b>	<b>Percentage</b>
<b>Investment Managers' Fees:</b>			
Debt Securities Managers	\$ 19,782,459,269	\$ 18,826,985	0.0952 %
Public Equity Managers	23,026,133,653	50,860,940	0.2209
Real Estate Managers	13,481,577,315	104,370,474	0.7742
Private Equity Managers	26,188,039,823	289,707,631	1.1063
Real Assets Managers	8,980,367,543	104,147,243	1.1597
Diversifying Strategies Managers	4,918,880,547	50,398,037	1.0246
Opportunity Portfolio Managers	2,449,303,169	28,633,134	1.1690
<b>Total Assets Under Management</b>	<b>\$ 98,826,761,319</b>		

**Other Investment Service Fees:**

Investment Consultants	12,762,315
Commissions and Other Fees	536,598,492
<b>Total Investment Service and Managers' Fees</b>	<b>\$1,196,305,251</b>

**Schedule of Broker Commissions**  
**For the Fiscal Year Ended June 30, 2023**

<b>Broker's Name</b>	<b>Commission</b>	<b>Number of Shares Traded</b>	<b>Commission per Share</b>
Goldman Sachs	\$ 2,127,647	189,310,515	\$ 0.0112
Instinet	976,081	565,748,491	0.0017
Morgan Stanley	752,190	210,721,523	0.0036
J.P. Morgan Securities	423,470	272,074,346	0.0016
UBS	400,017	119,468,852	0.0033
BofA Securities, Inc.	345,741	34,298,392	0.0101
Citigroup Global Markets Inc.	292,271	224,812,770	0.0013
Barclays Capital	249,821	98,383,876	0.0025
Jefferies	216,180	71,095,711	0.0030
Jones Trading Institutional Services LLC	139,531	7,084,327	0.0197
Merrill Lynch	116,360	65,382,873	0.0018
Citibank	115,126	53,870,912	0.0021
Virtu	109,955	23,815,454	0.0046
Pershing Securities	101,649	13,061,004	0.0078
HSBC	98,214	103,061,045	0.0010
Royal Bank of Canada	97,970	6,841,461	0.0143
Société Générale	85,614	45,734,628	0.0019
Credit Lyonnais Securities	82,100	176,947,661	0.0005
Cowen and Company, LLC	80,607	5,296,301	0.0152
Macquarie Capital Securities	77,169	102,971,394	0.0007

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, 2023	Percent of Total Fair Value <sup>1</sup>
<b>Debt Securities</b>		
U.S. Government Securities	\$ 8,483,288,262	8.58 %
U.S. Agency Securities	2,334,774,703	2.36
International Debt Securities	1,107,925,547	1.12
Non-U.S. Government Debt Securities	1,188,250,728	1.20
Corporate Bonds	1,830,329,917	1.85
Bank Loans	1,279,434,469	1.30
Municipal Bonds	38,810,930	0.04
Collateralized Mortgage Obligations	555,351,144	0.56
Commercial Mortgage Backed Securities	89,634,975	0.09
Asset-Backed Securities	529,215,498	0.54
Guaranteed Investment Contracts <sup>2</sup>	310,740,706	0.31
Domestic Fixed Income Funds	965,472,827	0.98
Global Fixed Income Funds	881,229,563	0.89
Repurchase Agreements	188,000,000	0.19
<b>Total Debt Securities</b>	<b>19,782,459,269</b>	<b>20.01</b>
<b>Public Equity</b>		
Derivatives in Asset Positions	87,004,722	0.09
Domestic Equity Securities	10,737,408,507	10.86
International Equity Securities	6,215,692,031	6.29
Domestic Equity Funds	3,511,250,074	3.55
Global Equity Funds	712,375,479	0.72
International Equity Funds	840,431,576	0.85
Target Date Funds	877,200,620	0.89
Oregon Savings Growth Plan - Self Directed	44,770,644	0.05
<b>Total Public Equity</b>	<b>23,026,133,653</b>	<b>23.30</b>
<b>Real Estate</b>	<b>13,481,577,315</b>	<b>13.64</b>
<b>Private Equity</b>	<b>26,188,039,823</b>	<b>26.50</b>
<b>Real Assets</b>	<b>8,980,367,543</b>	<b>9.09</b>
<b>Diversifying Strategies</b>	<b>4,918,880,547</b>	<b>4.98</b>
<b>Opportunity Portfolio</b>	<b>2,449,303,169</b>	<b>2.48</b>
<b>Total Fair Value</b>	<b>\$ 98,826,761,319</b>	<b>100.00 %</b>

<sup>1</sup> These percentages do not include cash and cash equivalents.

<sup>2</sup> Guaranteed Investment Contracts are stated at contract value.





## Actuarial Section





1455 SW Broadway  
Suite 1600  
Portland, OR 97201  
USA  
Tel +1 503 227 0634  
milliman.com

December 1, 2023

Public Employees Retirement Board  
Oregon Public Employees Retirement System

**Re: Actuarial Valuation as of December 31, 2022**

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, 2022. Our findings will be detailed in the forthcoming system-wide December 31, 2022 Actuarial Valuation report. Previously, we published a system-wide December 31, 2021 Actuarial Valuation report, which was issued September 19, 2022. The December 31, 2022 Actuarial Valuation reflects the benefit provisions of the system in effect as of the valuation date. The December 31, 2021 report reflected the benefit provisions of the system in effect as of the valuation date as well as Senate Bill 111 and House Bill 2906, which were signed into law in June 2021.

Both the December 31, 2022 Actuarial Valuation and the December 31, 2021 Actuarial Valuation are used to develop information provided in the Annual Comprehensive Financial Report (ACFR) for Oregon PERS. The December 31, 2022 Actuarial Valuation forms the basis for the *Actuarial Section* of the ACFR. The December 31, 2021 Actuarial Valuation is used to develop the financial reporting results required by Governmental Accounting Standards Board (GASB) Statement No. 67 for the Tier One/Tier Two 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 the ACFR for Oregon PERS is a subset of the results contained in the December 31, 2022 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 the December 31, 2022 actuarial valuation were adopted by the PERB based upon the results of the 2022 Experience Study conducted by Milliman, issued July 24, 2023. The actuarial assumptions and methods used in



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the December 31, 2021 actuarial valuation were adopted by the PERB based upon the results of the 2020 Experience Study conducted by Milliman, issued July 20, 2021. The assumptions and methods, including those used for funding purposes, 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 2023 ACFR based on the December 31, 2022 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, 2022 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, 2023 fiscal year end were determined based on the results of the December 31, 2021 Actuarial Valuation. The liability calculated at the actuarial valuation date was then adjusted to the Measurement Date using standard actuarial roll-forward procedures. The Total Pension Liability/Total OPEB Liability is compared to the Fiduciary Net Position as of the Measurement Date, as provided by PERS and measured on a fair market value of assets basis, to determine the Net Pension Liability (Asset) under GASB 67 and the Net OPEB Liability (Asset) under GASB 74.

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

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

These exhibits, along with a discussion of the actuarial basis underlying the results, are presented in our *GASB 67 Reporting for Fiscal Year End 2023* letter dated November 17, 2023.



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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 2023* letter dated November 17, 2023. 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, 2021 Actuarial Valuation were adopted by the PERB and established employer contributions for the July 1, 2023 to June 30, 2025 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 One/Tier Two 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 One/Tier Two members. Their benefit costs are calculated using two experience sharing pool valuations and some independent employer valuations. All school districts pool their Tier One/Tier Two experience through the school district pool. State government and some local governments pool their Tier One/Tier Two experience through the State and Local Government Rate Pool (SLGRP). As of December 31, 2022, there are also 124 independent employers who do not pool their Tier One/Tier Two experience with the other employers except through the Benefits in Force Reserve, which pools the experience of Tier One/Tier Two members in payee status across all employers and all other Tier One/Tier Two 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



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Chapter 238 arrangements. Chapter 238 benefits and Chapter 238A benefits are parts of a single plan.

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

### **Actuarial Basis**

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 reports. 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.

Actuarial assumptions, including discount rates, mortality tables, and others identified in this report, and actuarial cost methods are adopted by the Board. The Board is responsible for selecting the System’s funding policy, actuarial valuation methods, asset valuation methods, and assumptions. The policies, methods, and assumptions used in the valuation are those that have been so adopted and are described in the reports. All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which, in our professional opinion, 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 and are expected to have no significant bias. In our professional opinion, the assumptions and method selected by the Board for funding purposes follow the guidance under relevant actuarial standards of practice.

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.



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Future actuarial measurements may differ significantly from the current measurements presented in these reports due to such factors as, but not limited to, 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 modifications to contribution calculations 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 the October 2021 and September 2023 public Board meetings.

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.

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 or create a legal duty to any third-party recipient of 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 valuation results were developed using models that employ standard actuarial techniques for pension valuations. We have reviewed the models, including their inputs, calculations, and outputs, for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice. Results were rolled forward from the valuation date to the measurement date for GASB 67 and 74 results using the assumptions and methods described in the relevant letters.

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*



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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 One/Tier Two (including Retiree Healthcare)

Actuarial Methods and Valuation Procedures

In September 2023 the Board adopted the following actuarial methods and valuation procedures for the December 31, 2022 and 2023 actuarial valuations of PERS Tier One/Tier Two 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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<i>Tier One/Tier Two UAL amortization</i>	<p>The Tier One/Tier Two UAL amortization period was reset to 20 years as of December 31, 2013. Gains and losses between subsequent odd-year valuations were amortized as a level percentage of projected combined valuation payroll (Tier One/Tier Two plus OPSRP payroll) over a closed 20-year period from the valuation in which they are first recognized.</p> <p>Senate Bill 1049 was signed into law in June 2019 and required a one-time re-amortization of Tier One/Tier Two 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 One/Tier Two UAL gains or losses will be amortized over 20 years. The closed period amortization under Senate Bill 1049 will continue to decline and has 20 years remaining as of the December 31, 2022 rate-setting valuation.</p>
<i>Retiree Healthcare UAL amortization</i>	<p>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 One/Tier Two 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.</p> <p>If RHIA or RHIPA are in actuarial surplus (over 100% funded), the surplus is amortized over a rolling 20-year period over Tier One/Tier Two payroll. The resulting negative UAL rate will offset the normal cost of the program, but not below 0.00%.</p>
<i>Asset valuation method</i>	<p>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.</p> <p>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.</p>



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<p><i>Contribution rate stabilization method</i></p>	<p>The UAL Rate component for a rate pool (e.g., Tier One/Tier Two SLGRP, Tier One/Tier Two 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).</p> <p><u>Collar Width:</u> 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:</p> <ul style="list-style-type: none"> <li>• Tier One/Tier Two SLGRP and Tier One/Tier Two School Districts Pool: 3% of payroll</li> <li>• OPSRP: 1% of payroll</li> <li>• Tier One/Tier Two 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 One/Tier Two independent employer with a funded status (excluding side accounts) less than 100%.</li> </ul> <p><u>UAL Rate decrease restrictions:</u> 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.</p>
<p><i>Offset for Member Redirect Contributions</i></p>	<p>Under Senate Bill 1049, a portion of the 6% of pay member contribution otherwise made to the IAP is redirected to fund Tier One/Tier Two and OPSRP defined benefits beginning July 1, 2020. For Tier One/Tier Two 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.</p> <p>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 One/Tier Two and 0.65% of total payroll for OPSRP.</p>
<p><i>Allocation of Liability for Service Segments</i></p>	<p>For active Tier One/Tier Two members who have worked for multiple PERS employers over their career, the calculated actuarial accrued liability is allocated among the employers based on a weighted average of the Money Match methodology, which uses account balance, and the Full Formula methodology, which uses service. The allocation is 5% (0% for police &amp; fire) based on account balance with each employer and 95% (100% for police &amp; fire) based on service with each employer.</p> <p>The entire normal cost is allocated to the current employer.</p>
<p><i>Allocation of Benefits-In-Force (BIF) Reserve</i></p>	<p>The BIF reserve is allocated to each rate pool in proportion to the retiree liability attributable to the rate pool.</p>



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<p><i>Census Data</i></p>	<p>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.</p> <p>PERS staff assisted in resolving questions and inconsistencies discovered in the data review and provided updated records or direction for adjusting data as needed.</p> <p>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.</p>
<p><i>Internal Revenue Code 415 Benefit Limits</i></p>	<p>Annual benefit limits under Internal Revenue Code 415 are not explicitly reflected in the valuation.</p> <p>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.</p>



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**Economic Assumptions**

The Board adopted the following economic assumptions for the December 31, 2022 and 2023 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2022 Experience Study, published in July 2023. The assumption selection process and rationale is described in detail in that report.

<i>Investment return</i>	6.90% compounded annually
<i>Pre-2014 Interest crediting</i>	8.00% compounded annually on members' regular account balances 8.25% compounded annually on members' variable account balances
<i>Post-2013 Interest crediting</i>	6.90% compounded annually on members' regular account balances 6.90% compounded annually on members' variable account balances
<i>Inflation</i>	2.40% compounded annually
<i>Administrative expenses</i>	\$64.0 million per year is added to the total system normal cost and allocated between Tier One/Tier Two and OPSRP based on valuation payroll.
<i>Payroll growth</i>	3.40% compounded annually. This assumption represents the sum of the inflation assumption and a real wage growth assumption of 100 basis points.
<i>Healthcare cost trend</i>	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. That report includes detailed research performed by a committee of economists and actuaries (including a Milliman representative) utilizing the "Getzen Model" named after the professor who developed the model. We believe that the research and the model are fundamentally and technically sound and advance the body of knowledge available to actuaries to project long-term medical trends more accurately. Milliman uses the Getzen Model as the foundation for the trend that we recommend to our clients for OPEB valuations. The model produces long-range trend assumptions built on long-term relationships between certain key economic factors.

Year*	Rate	Year	Rate
2023	6.60%	2031	4.40%
2024	7.00%	2032-2054	4.20%
2025	6.40%	2055-2064	4.30%
2026	5.70%	2065-2066	4.20%
2027	5.10%	2067-2068	4.10%
2028	4.90%	2069-2070	4.00%
2029	4.80%	2071-2073	3.90%
2030	4.60%	2074+	3.80%

\*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, 2022 and 2023 actuarial valuations. All assumptions were reviewed and adopted in conjunction with the 2022 Experience Study, published in July 2023. The study relied on data from an observation period of January 1, 2017 to December 31, 2022, with the exception of the merit scale assumption, which relied on data from 2012 through 2022 (with certain exclusions due to one-off events that are not expected to be indicative of future experience, as detailed in the 2022 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	125% of Employee table with same job category and set back as Healthy Retiree assumption	2022
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, 2022 valuation.

Age	Police & Fire			General Service			School Districts			Judges
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs	
Less than 50						15.0%			25.0%	
50	1.5%	3.5%	38.0%			15.0%			25.0%	
51	1.5%	3.5%	28.0%			15.0%			25.0%	
52	1.5%	3.5%	28.0%			15.0%			25.0%	
53	1.5%	3.5%	28.0%			15.0%			32.0%	
54	1.5%	3.5%	28.0%			15.0%			25.0%	
55	3.0%	20.0%	28.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
56	3.0%	12.0%	28.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
57	3.0%	12.0%	28.0%	1.5%	2.5%	15.0%	1.5%	3.5%	25.0%	
58	6.0%	12.0%	28.0%	1.5%	8.0%	21.0%	1.5%	11.0%	27.5%	
59	6.0%	12.0%	28.0%	3.5%	8.0%	21.0%	4.5%	11.0%	27.5%	



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Age	Police & Fire			General Service			School Districts			Judges
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs	
60	6.0%	13.0%	32.0%	6.0%	12.0%	21.0%	6.5%	14.5%	27.5%	15.0%
61	6.0%	14.0%	28.0%	6.0%	11.0%	21.0%	6.5%	14.5%	27.5%	15.0%
62	15.0%	25.0%	38.0%	13.0%	18.5%	28.5%	15.0%	21.0%	34.0%	15.0%
63	15.0%	15.0%	31.0%	11.5%	16.5%	23.0%	13.0%	19.5%	29.0%	15.0%
64	15.0%	15.0%	31.0%	12.5%	16.5%	23.0%	13.0%	19.5%	29.0%	15.0%
65	40.0%	40.0%	45.0%	19.5%	28.0%	37.5%	25.5%	34.5%	45.0%	15.0%
66	40.0%	40.0%	45.0%	27.5%	36.0%	40.5%	23.0%	36.5%	45.0%	15.0%
67	40.0%	40.0%	45.0%	22.5%	26.5%	34.0%	21.0%	34.5%	38.0%	20.0%
68	40.0%	40.0%	45.0%	19.5%	26.5%	28.5%	21.0%	30.0%	28.5%	20.0%
69	40.0%	40.0%	45.0%	19.5%	26.5%	28.5%	21.0%	30.0%	28.5%	20.0%
70	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	30.0%	28.5%	30.0%
71	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	30.0%	28.5%	30.0%
72	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	30.0%	28.5%	30.0%
73	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	30.0%	28.5%	30.0%
74	100.0%	100.0%	100.0%	25.0%	28.5%	28.5%	21.0%	30.0%	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 One, age 60 for Tier Two, 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 selecting either a total or partial lump sum, both assumptions are now zero. The zero assumption was first adopted for total lump sums effective December 31, 2020 and for partial lump sums effective December 31, 2022.

Lump Sum Option at Retirement	
Partial Lump Sum:	0.0% for all years
Total Lump Sum:	0.0% for all years
No Lump Sum:	100.0% for all years



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**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.

**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. All rates were first adopted effective December 31, 2022.

	Percentage of the 1985 Disability Class 1 Rates
Duty Disability Police & Fire	25%
Duty Disability General Service	0.6%
Ordinary Disability	20% with 0.14% 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.



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**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 Male termination assumption was first adopted effective December 31, 2016. The School District Female termination assumption was first adopted effective December 31, 2022. The Police & Fire termination assumption was first adopted effective December 31, 2022.

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%	13.00%	12.50%	14.00%	7.00%
5	6.86%	7.91%	7.19%	7.23%	4.32%
10	3.31%	4.43%	4.13%	4.77%	2.87%
15	2.30%	3.17%	2.93%	3.43%	1.90%
20	1.62%	2.43%	2.08%	2.47%	1.26%
25	1.20%	1.75%	1.47%	1.78%	0.90%
30+	1.20%	1.75%	1.40%	1.40%	0.90%

Termination rates are not applied after a member reaches retirement eligibility. For a complete table of rates, please refer to the 2022 Experience Study report for the System, published in July 2023.

**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.

**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



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**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, 2022.

Duration	School District	Other General Service	Police & Fire
0	5.54%	4.77%	6.12%
1	5.23%	4.39%	5.46%
5	4.02%	3.10%	3.38%
10	2.66%	1.93%	1.91%
15	1.53%	1.17%	1.30%
20	0.68%	0.73%	1.18%
25	0.17%	0.50%	1.15%
30+	0.06%	0.38%	0.80%

In addition to the merit scale increases shown above, an addition 2% annual merit salary increase assumption applies to salary increases from 2023 to 2024 and from 2024 to 2025.

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

For a complete table of rates, please refer to the 2022 Experience Study for the System, published in July 2023.

**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
<b>Actives</b>	
• State General Service Male	8.75% 2022
• State General Service Female	5.25% 2022
• School District Male	9.75% 2022
• School District Female	6.50% 2020
• Local General Service Male	6.50% 2022
• Local General Service Female	4.50% 2020
• State Police & Fire	4.75% 2022
• Local Police & Fire	7.25% 2022
<b>Dormant Members</b>	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 state general service and local general services rates were adopted December 31, 2020. The school district assumption was adopted effective December 31, 2012. The state police & fire assumption and local police & fire assumptions were adopted effective December 31, 2022.

Vacation Pay	
<b>Tier One</b>	
• State General Service	2.50%
• School District	0.25%
• Local General Service	3.50%
• State Police & Fire	3.00%
• Local Police & Fire	4.25%
<b>Tier Two</b>	
	0.00%

**Retiree Healthcare Participation**

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

Retiree Healthcare Participation	
<b>RHIPA</b>	
• 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	12.0%
• 25 – 29 years of service	20.0%
• 30+ years of service	25.0%
<b>RHIA</b>	
• Healthy Retired	25.0%
• Disabled Retired	15.0%

The participations rates were adopted December 31, 2022.

**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.



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### 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 One/Tier Two. The methods and assumptions that differ for OPSRP are summarized below. The Board adopted the following methods, procedures and assumptions for the December 31, 2022 and December 31, 2023 actuarial valuations.

**Actuarial Methods and Valuation Procedures**

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

<i>Administrative expenses</i>	\$64.0 million per year is added to the total system normal cost and allocated between Tier One/Tier Two and OPSRP based on valuation payroll.
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**Demographic Assumptions**

**Rates of Retirement from Active Status**

Age	Police & Fire			General Service			School Districts		
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs
50	0.50%	1.50%	5.50%						
51	0.50%	1.50%	5.50%						
52	0.50%	1.50%	5.50%						
53	0.50%	1.50%	28.00%						
54	0.50%	1.50%	28.00%						
55	2.00%	5.00%	28.00%	1.00%	2.50%	5.00%	0.50%	2.50%	5.00%
56	2.00%	5.00%	28.00%	1.00%	2.50%	5.00%	0.50%	2.50%	5.00%
57	2.00%	5.00%	28.00%	1.00%	2.50%	7.50%	1.00%	2.50%	7.50%
58	5.00%	5.00%	28.00%	1.50%	3.00%	30.00%	1.50%	3.00%	30.00%
59	5.00%	5.00%	28.00%	2.00%	3.00%	25.00%	1.50%	3.00%	25.00%
60	5.00%	15.00%	32.00%	2.50%	3.75%	20.00%	2.50%	3.75%	20.00%
61	5.00%	8.50%	28.00%	2.50%	5.00%	20.00%	2.50%	5.00%	20.00%
62	10.00%	25.00%	38.00%	6.50%	12.00%	30.00%	6.00%	12.00%	30.00%
63	10.00%	15.00%	31.00%	6.50%	10.00%	20.00%	6.00%	10.00%	20.00%
64	10.00%	15.00%	31.00%	6.50%	10.00%	20.00%	6.00%	10.00%	20.00%
65	20.00%	35.00%	40.00%	15.50%	35.00%	20.00%	12.50%	35.00%	20.00%
66	20.00%	35.00%	40.00%	18.50%	33.00%	20.00%	12.50%	33.00%	20.00%
67	20.00%	35.00%	40.00%	17.00%	22.00%	30.00%	11.00%	22.00%	30.00%
68	20.00%	35.00%	40.00%	14.00%	20.00%	25.00%	9.00%	20.00%	25.00%



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Age	Police & Fire			General Service			School Districts		
	< 13 yrs	13-24 yrs	25+ yrs	< 15 yrs	15-29 yrs	30+ yrs	< 15 yrs	15-29 yrs	30+ yrs
69	20.00%	35.00%	40.00%	14.00%	20.00%	25.00%	9.00%	20.00%	25.00%
70	100.00%	100.00%	100.00%	14.00%	20.00%	25.00%	9.00%	20.00%	25.00%
71	100.00%	100.00%	100.00%	14.00%	20.00%	25.00%	9.00%	20.00%	25.00%
72	100.00%	100.00%	100.00%	14.00%	20.00%	25.00%	9.00%	20.00%	25.00%
73	100.00%	100.00%	100.00%	14.00%	20.00%	25.00%	9.00%	20.00%	25.00%
74	100.00%	100.00%	100.00%	14.00%	20.00%	25.00%	9.00%	20.00%	25.00%
75 +	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

**Retirement from Dormant Status**

Dormant members are assumed to retire at 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 One/Tier Two and OPSRP

A summary of key changes implemented since the December 31, 2021 valuation are described briefly below.

### Changes in Actuarial Methods and Allocation Procedures

- An adjustment was added to the side account amortization calculations and Pre-SLGRP liability and surplus calculations to reflect the delay between when a rate is calculated and when it takes effect.
- The timing of the amortization period for Pre-SLGRP liabilities and surpluses for SLGRP employers was revised to align the biennial rate-setting cycle.

### Changes in Economic Assumptions

- Assumed administrative expenses were updated and changed to a combined assumption of \$64 million for Tier One/Tier Two and OPSRP.
- The assumed healthcare cost trend rates for the RHIPA program were updated.

### Changes in Demographic Assumptions

- The merit/longevity component assumption of individual member salary increases were updated for all groups, including adding a select assumption of an additional 2% for all members for two years.
- 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 2022 Experience Study for the System, published in July 2023.
- Termination, disability and retirement rates were updated for some groups to more closely match observed and anticipated future experience.
- Assumptions for unused sick leave and vacation pay were updated.
- 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, 2022 has been prepared and provided to Oregon PERS for inclusion in the Actuarial Section of the 2023 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. 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, 2022 measurement date in letters dated November 16, 2022 and January 20, 2023, respectively. The results for a measurement date of June 30, 2023 will be provided separately.

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, 2022 measurement date in letters dated November 16, 2022 and January 20, 2023, respectively. The results for a measurement date of June 30, 2023 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 <sup>1</sup>	
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 <sup>2</sup>
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 <sup>3</sup>	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	\$12,042,674	\$66,650	4.5%	797	
12/31/2021	177,739	\$12,684,124	\$71,364	7.1%	798	
12/31/2022	183,642	\$13,856,583	\$75,454	5.7%	796	

<sup>1</sup> 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.

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

<sup>3</sup> 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 <sup>2</sup>	Average Annual Allowances
	Count	Annual Allowances <sup>1</sup>	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 <sup>3</sup>	6,754	\$149,474	2,863	\$35,151	101,668	\$2,154,856	5.6%	\$21,195
12/31/2005 <sup>3</sup>	4,472	\$149,127	3,217	\$36,784	102,923	\$2,267,198	5.2%	\$22,028
12/31/2006 <sup>3</sup>	5,060	\$151,240	3,263	\$39,735	104,720	\$2,378,704	4.9%	\$22,715
12/31/2007 <sup>3</sup>	5,385	\$183,232	3,304	\$40,590	106,801	\$2,521,345	6.0%	\$23,608
12/31/2008 <sup>3</sup>	5,963	\$171,484	3,626	\$47,062	109,138	\$2,645,767	4.9%	\$24,242
12/31/2009 <sup>3</sup>	6,377	\$226,713	3,374	\$46,228	112,141	\$2,826,252	6.8%	\$25,203
12/31/2010 <sup>3</sup>	6,359	\$217,424	3,512	\$51,627	114,988	\$2,992,048	5.9%	\$26,021
12/31/2011 <sup>3</sup>	8,715	\$282,098	3,679	\$55,633	120,024	\$3,218,514	7.6%	\$26,816
12/31/2012 <sup>3</sup>	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 <sup>4</sup>	6,910	\$235,250	3,524	\$66,621	131,638	\$3,804,651	4.6%	\$28,902
12/31/2015 <sup>4</sup>	8,566	\$304,818	3,781	\$73,305	136,423	\$4,036,165	6.1%	\$29,586
12/31/2016 <sup>4</sup>	6,413	\$242,372	3,931	\$80,903	138,905	\$4,197,633	4.0%	\$30,219
12/31/2017 <sup>4</sup>	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
12/31/2021	8,264	\$337,090	4,837	\$125,758	159,688	\$5,351,880	4.1%	\$33,515
12/31/2022	8,597	\$370,754	4,973	\$138,227	163,312	\$5,584,406	4.3%	\$34,195

<sup>1</sup> Additions to annual allowances reflect the combined effects of new retirements and COLA increases since the previous valuation date.

<sup>2</sup> Since last valuation date.

<sup>3</sup> 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.

<sup>4</sup> 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 (amounts in millions)

Actuarial Valuation Date	Actuarial Value of Assets <sup>1,2</sup> (a)	Actuarial Accrued Liability (AAL) <sup>2</sup> (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll <sup>3</sup> (c)	UAAL as a % of Covered Payroll ((b-a)/c)
<b>Tier One/Tier Two State &amp; Local Government Rate Pool</b>						
12/31/2017 <sup>4</sup>	\$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 <sup>4</sup>	\$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%
12/31/2021 <sup>4</sup>	\$39,133.0	\$47,155.1	\$8,022.1	83.0%	\$1,981.7	404.8%
12/31/2022	\$36,517.0	\$48,119.5	\$11,602.4	75.9%	\$1,883.4	616.0%
<b>Tier One/Tier Two School District Rate Pool</b>						
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%
12/31/2021	\$29,890.8	\$31,865.4	\$1,974.7	93.8%	\$1,216.3	162.3%
12/31/2022	\$27,879.3	\$32,457.6	\$4,578.3	85.9%	\$1,195.0	383.1%
<b>Tier One/Tier Two Independent Employers and Judiciary</b>						
12/31/2017 <sup>4</sup>	\$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 <sup>4</sup>	\$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%
12/31/2021 <sup>4</sup>	\$5,807.6	\$7,528.6	\$1,720.9	77.1%	\$320.8	536.5%
12/31/2022	\$5,675.4	\$7,743.0	\$2,067.5	73.3%	\$310.2	666.6%
<b>OPSRP Rate Pool</b>						
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%
12/31/2020	\$7,548.8	\$10,008.1	\$2,459.3	75.4%	\$8,355.4	29.4%
12/31/2021	\$10,251.2	\$11,806.2	\$1,555.0	86.8%	\$9,165.3	17.0%
12/31/2022	\$11,060.9	\$14,544.9	\$3,484.1	76.0%	\$10,468.0	33.3%
<b>Postemployment Healthcare Benefits - Retirement Health Insurance Account</b>						
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%)
12/31/2021	\$763.2	\$369.2	(\$394.0)	206.7%	\$3,518.8	(11.2%)
12/31/2022	\$720.0	\$345.0	(\$374.9)	208.7%	\$3,388.6	(11.1%)
<b>Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account</b>						
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%)
12/31/2021	\$82.9	\$45.9	(\$37.0)	180.4%	\$1,053.3	(3.5%)
12/31/2022	\$85.9	\$41.3	(\$44.6)	208.0%	\$1,008.9	(4.4%)

Notes:

<sup>1</sup> Side account assets are included with Tier One/Tier Two assets.

<sup>2</sup> Excludes effect of Multnomah Fire District (net UAAL of \$102 million as of 12/31/2022).

<sup>3</sup> Covered payroll shown is for members of the rate pool benefiting from the specified program. For example, Tier One/Tier Two School District payroll is only payroll for Tier One/Tier Two members and excludes OPSRP. However, UAL is amortized using combined Tier One/Tier Two and OPSRP payroll.

<sup>4</sup> 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 One/Tier Two, OPSRP, and retiree healthcare. Note that the defined benefit pension plan constitutes over 99% of the consolidated assets and liabilities.

Valuation Date <sup>2</sup>	Actuarial Accrued Liability <sup>1</sup>			Valuation Assets <sup>1,3</sup>	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)		(1)	(2)	(3)
	12/31/2013 <sup>4</sup>	\$7,120.1	\$39,531.5		\$16,476.8	\$60,372.9	100%
12/31/2014 <sup>5</sup>	\$6,950.4	\$46,576.7	\$20,470.8	\$61,798.3	100%	100%	40%
12/31/2015 <sup>4</sup>	\$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 <sup>4</sup>	\$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 <sup>4</sup>	\$4,907.4	\$59,461.0	\$25,540.5	\$71,008.3	100%	100%	26%
12/31/2020 <sup>6</sup>	\$4,583.7	\$63,068.9	\$28,079.3	\$73,102.1	100%	100%	19%
12/31/2021 <sup>4</sup>	\$4,557.6	\$64,992.6	\$29,266.3	\$85,847.4	100%	100%	56%
12/31/2022	\$4,099.4	\$67,005.1	\$32,190.6	\$81,879.8	100%	100%	33%

<sup>1</sup> Includes effect of Multnomah Fire District (net UAAL of \$102 million as of 12/31/2022).

<sup>2</sup> An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.

<sup>3</sup> Includes the value of UAL Lump Sum Side Accounts.

<sup>4</sup> Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.

<sup>5</sup> 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.

<sup>6</sup> Results for 12/31/2020 and later include Employee Pension Stability Accounts (EPSA) balances as member contributions.



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Actuarial Schedules

Solvency Test

Tier One/Tier Two Pension

(dollar amounts in millions)

Valuation Date <sup>2</sup>	Actuarial Accrued Liability <sup>1</sup>			Valuation Assets <sup>1,3</sup>	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)		(1)	(2)	(3)
	12/31/2013 <sup>4</sup>	\$7,120.1	\$39,116.2		\$14,114.1	\$58,384.0	100%
12/31/2014 <sup>5</sup>	\$6,950.4	\$46,113.5	\$17,331.0	\$59,370.6	100%	100%	36%
12/31/2015 <sup>4</sup>	\$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 <sup>4</sup>	\$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 <sup>4</sup>	\$4,907.4	\$58,567.8	\$17,888.4	\$64,121.8	100%	100%	4%
12/31/2020 <sup>6</sup>	\$4,557.6	\$62,012.8	\$18,721.9	\$64,829.5	100%	97%	0%
12/31/2021	\$4,446.8	\$63,723.1	\$18,425.2	\$74,750.1	100%	100%	36%
12/31/2022	\$3,924.8	\$65,503.9	\$18,935.1	\$70,013.1	100%	100%	3%

<sup>1</sup> Includes effect of Multnomah Fire District (net UAAL of \$102 million as of 12/31/2022).

<sup>2</sup> An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.

<sup>3</sup> Includes the value of UAL Lump Sum Side Accounts.

<sup>4</sup> Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.

<sup>5</sup> 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.

<sup>6</sup> Results for 12/31/2020 and later include Employee Pension Stability Accounts (EPSA) balances as member contributions.

OPSRP Pension

(dollar amounts in millions)

Valuation Date <sup>1</sup>	Actuarial Accrued Liability			Valuation Assets	Portion of Actuarial Accrued Liabilities Covered by Assets		
	Active Member Contributions (1)	Retired Members and Beneficiaries (2)	Other Members (3)		(1)	(2)	(3)
	12/31/2013	\$0.0	\$51.2		\$2,192.1	\$1,630.2	100%
12/31/2014 <sup>2</sup>	\$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 <sup>3</sup>	\$26.1	\$726.1	\$9,255.9	\$7,548.8	100%	100%	73%
12/31/2021	\$110.8	\$950.3	\$10,745.1	\$10,251.2	100%	100%	86%
12/31/2022	\$174.6	\$1,197.7	\$13,172.6	\$11,060.9	100%	100%	74%

<sup>1</sup> An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.

<sup>2</sup> 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.

<sup>3</sup> Results for 12/31/2020 and later include Employee Pension Stability Accounts (EPSA) balances as member contributions.



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**Retiree Healthcare (RHIA and RHIPA)**

(dollar amounts in millions)

Retiree Health Insurance Account (RHIA)							
Actuarial Accrued Liability							
Valuation Date <sup>1</sup>	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)
12/31/2013	\$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%
12/31/2021	\$0.0	\$308.9	\$60.2	\$763.2	100%	100%	754%
12/31/2022	\$0.0	\$294.5	\$50.5	\$720.0	100%	100%	842%

<sup>1</sup> An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.

Retiree Health Insurance Premium Account (RHIPA)							
Actuarial Accrued Liability							
Valuation Date <sup>1</sup>	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)
12/31/2013	\$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%
12/31/2021	\$0.0	\$10.2	\$35.7	\$82.9	100%	100%	203%
12/31/2022	\$0.0	\$8.9	\$32.4	\$85.9	100%	100%	238%

<sup>1</sup> An extensive revision of the actuarial assumptions occurs prior to each even-year valuation; therefore, the figures are not directly comparable.



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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	
	2022	2021
<b>Type of Activity</b>		
Retirements from Active Status	(\$39.4)	(\$89.9)
Active Mortality and Withdrawal	92.4	74.0
Pay Increases	(831.7)	(676.2)
Contributions	222.5	341.3
Interest Crediting Experience	130.6	(72.3)
Investment Income	(6,632.8)	8,739.5
Retirement, Mortality and Lump Sums from Inactive Status	12.1	14.0
Retiree and Beneficiary Mortality	33.4	137.7
New Entrants <sup>1</sup>	(145.5)	(106.0)
Other	(48.2)	142.5
<b>Gain (or Loss) During Year from Financial Experience</b>	<b>(\$7,206.7)</b>	<b>\$8,504.6</b>
<b>Non-Recurring Items</b>		
Assumption Changes	(1,176.9)	0.0
Plan Changes	0.0	0.0
<b>Composite Gain (or Loss) During Year</b>	<b>(\$8,383.5)</b>	<b>\$8,504.6</b>

<sup>1</sup> 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 One/Tier Two 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 One/Tier Two Pension Program	\$ Gain (or Loss) for Year	
	2022	2021
<b>Type of Activity</b>		
Retirements from Active Status	(\$32.2)	(\$87.2)
Active Mortality and Withdrawal	25.2	19.7
Pay Increases	(450.6)	(412.7)
Contributions	160.4	255.6
Interest Crediting Experience	130.6	(72.3)
Investment Income	(5,616.3)	7,445.1
Retirement, Mortality and Lump Sums from Inactive Status	1.7	8.1
Retiree and Beneficiary Mortality	31.7	136.8
New Entrants	(2.2)	(2.2)
Other	(53.3)	126.5
<b>Gain (or Loss) During Year from Financial Experience</b>	<b>(\$5,805.0)</b>	<b>\$7,417.5</b>
<b>Non-Recurring Items</b>		
Assumption Changes	(582.1)	0.0
Plan Changes	0.0	0.0
<b>Composite Gain (or Loss) During Year</b>	<b>(\$6,387.1)</b>	<b>\$7,417.5</b>

OPSRP Pension Program	\$ Gain (or Loss) for Year	
	2022	2021
<b>Type of Activity</b>		
Retirements from Active Status	(\$7.2)	(\$2.6)
Active Mortality and Withdrawal	\$67.1	54.3
Pay Increases	(\$381.2)	(263.6)
Contributions	\$61.1	84.3
Investment Income	(\$944.0)	1,197.5
Retirement, Mortality and Lump Sums from Inactive Status	\$10.5	5.9
Retiree and Beneficiary Mortality	\$1.7	0.9
New Entrants <sup>1</sup>	(\$143.3)	(103.7)
Other	(\$9.9)	2.7
<b>Gain (or Loss) During Year from Financial Experience</b>	<b>(\$1,345.2)</b>	<b>\$975.6</b>
<b>Non-Recurring Items</b>		
Assumption Changes	(\$605.1)	0.0
Plan Changes	\$0.0	0.0
<b>Composite Gain (or Loss) During Year</b>	<b>(\$1,950.3)</b>	<b>\$975.6</b>

<sup>1</sup> Accrued liability associated with newentrants is shown. For a full assessment of the newentrant effect on UAL, this would need to be combined with contributions associated with newentrants.



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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)

Retiree Healthcare Programs	\$ Gain (or Loss) for Year			
	RHIA		RHIPA	
	2022	2021	2022	2021
<b>Type of Activity</b>				
Contributions	\$0.4	\$0.6	\$0.6	\$0.7
Investment Income	(65.1)	88.3	(7.4)	8.6
Other	11.1	10.6	4.0	2.7
<b>Gain (or Loss) During Year from Financial Experience</b>	<b>(\$53.6)</b>	<b>\$99.5</b>	<b>(\$2.8)</b>	<b>\$12.0</b>
<b>Non-Recurring Items</b>				
Assumption Changes	8.8	0.0	1.5	0.0
Plan Changes	0.0	0.0	0.0	0.0
<b>Composite Gain (or Loss) During Year</b>	<b>(\$44.8)</b>	<b>\$99.5</b>	<b>(\$1.3)</b>	<b>\$12.0</b>



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Actuarial Schedules

Schedules of Funding Progress

(dollar amounts in millions)

Actuarial Valuation Date	Actuarial Value of Assets <sup>1</sup> (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)
<b>Pension Benefits - Tier One/Tier Two and OPSRP<sup>2</sup></b>						
12/31/2013 <sup>3</sup>	\$60,014.1	\$62,593.6	\$2,579.5	95.9%	\$8,671.8	29.7%
12/31/2014 <sup>4</sup>	\$61,395.2	\$73,458.9	\$12,063.7	83.6%	\$9,115.8	132.3%
12/31/2015 <sup>3</sup>	\$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 <sup>3</sup>	\$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 <sup>3</sup>	\$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%	\$12,042.7	190.3%
12/31/2021 <sup>3</sup>	\$85,001.3	\$98,401.4	\$13,400.1	86.4%	\$12,684.1	105.6%
12/31/2022	\$81,074.0	\$102,908.8	\$21,834.8	78.8%	\$13,856.6	157.6%
<b>Postemployment Healthcare Benefits - Retirement Health Insurance Account</b>						
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%	\$12,042.7	(2.3%)
12/31/2021	\$763.2	\$369.2	(\$394.0)	206.7%	\$12,684.1	(3.1%)
12/31/2022	\$720.0	\$345.0	(\$374.9)	208.7%	\$13,856.6	(2.7%)
<b>Postemployment Healthcare Benefits - Retiree Health Insurance Premium Account</b>						
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%)
12/31/2021	\$82.9	\$45.9	(\$37.0)	180.4%	\$3,938.0	(0.9%)
12/31/2022	\$85.9	\$41.3	(\$44.6)	208.0%	\$4,278.2	(1.0%)

Notes:

- <sup>1</sup> Side account assets are included with pension assets.
- <sup>2</sup> Includes UAAL for Multnomah Fire District (\$102 million as of 12/31/2022).
- <sup>3</sup> Reflects the transfer in assets and liabilities for new employers that joined the SLGRP effective January 1 following the valuation date.
- <sup>4</sup> 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.

<i>Membership</i>	All employees of public employers participating in this System who are in qualifying positions become members of the System after completing six months of service except those who are eligible for and have elected to participate in an optional retirement plan. Different benefit provisions of the plan apply based on date of hire.	
	<b>Tier One</b>	Hired prior to 1996
	<b>Tier Two</b>	Hired after 1995 and before August 29, 2003
	<b>OPSRP</b>	Hired after August 28, 2003, and neither a judge nor a former Tier One/Tier Two member eligible to reestablish Tier One/Tier Two membership
	<b>Judges</b>	Members of the State Judiciary
<i>Member Contributions</i>	<b>Judges</b>	7% of salary
	<b>All others</b>	Prior to January 1, 2004, Tier One/Tier Two members contributed 6% of salary to member accounts. Effective July 1, 2020: 2.50% of salary for Tier One/Tier Two 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.
<i>Employer Contributions</i>	Set by the PERS Board based on actuarial calculations that follow Board rate-setting policies for employers.	



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**Summary of Chapter 238 Provisions — Tier One/Tier Two and Judges**

<i>Normal Retirement Date</i>	<b>Police and Fire</b>	Age 55													
	<b>Judges</b>	Age 65													
	<b>Tier One General Service</b>	Age 58													
	<b>Tier Two General Service</b>	Age 60													
<i>Normal Retirement Allowance</i>	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.														
	<b>Full Formula</b>	The percentage multiplier from the table below multiplied by final average salary and years of creditable service plus a prior service pension, if applicable.													
	<table border="1"> <thead> <tr> <th>Percentage Multiplier</th> <th>Membership Classification</th> </tr> </thead> <tbody> <tr> <td>2.00%</td> <td>Fire, Police and Legislators</td> </tr> <tr> <td>1.67%</td> <td>All other members</td> </tr> </tbody> </table>		Percentage Multiplier	Membership Classification	2.00%	Fire, Police and Legislators	1.67%	All other members							
Percentage Multiplier	Membership Classification														
2.00%	Fire, Police and Legislators														
1.67%	All other members														
	<b>Money Match</b>	The Member's account balance and a matching employer amount converted to an actuarially equivalent annuity.													
	<b>Formula Plus Annuity</b>	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.													
	<table border="1"> <thead> <tr> <th>Percentage Multiplier</th> <th>Membership Classification</th> </tr> </thead> <tbody> <tr> <td>1.35%</td> <td>Fire, Police and Legislators</td> </tr> <tr> <td>1.00%</td> <td>All other members</td> </tr> </tbody> </table>		Percentage Multiplier	Membership Classification	1.35%	Fire, Police and Legislators	1.00%	All other members							
Percentage Multiplier	Membership Classification														
1.35%	Fire, Police and Legislators														
1.00%	All other members														
	<b>Judges</b>	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.													
	<table border="1"> <thead> <tr> <th>Plan</th> <th>Percentage Factor (up to 16 years)</th> <th>Percentage Factor (after 16 years)</th> <th>Maximum Percentage of Final Average Salary</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>2.8125%</td> <td>1.67%</td> <td>65%</td> </tr> <tr> <td>B</td> <td>3.75%</td> <td>2.00%</td> <td>75%</td> </tr> </tbody> </table>			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%
Plan	Percentage Factor (up to 16 years)	Percentage Factor (after 16 years)	Maximum Percentage of Final Average Salary												
A	2.8125%	1.67%	65%												
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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 One members, lump sum payment of unused vacation time. For Tier Two members, covered salary is limited by Internal Revenue Code 401(a)(17). The limit was \$280,000 in 2019. Tier One 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 One 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.

<b>SB 656 Increase</b>	<b>Years of Service</b>	<b>General Service</b>	<b>Police &amp; Fire</b>
	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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<i>Early Retirement Eligibility</i>	<b>Police and Fire</b>	Age 50 or 30 years of service
	<b>Judges</b>	Age 60
	<b>General Service</b>	Age 55 or 30 years of service
<i>Early Retirement Allowance</i>	Normal retirement allowance, actuarially reduced to early retirement age. However, there is no reduction applied if a member has completed 30 years of service (25 years for police & fire members) or for judges in Plan B.	
<i>Vesting</i>	Contributions made in any part of five calendar years or attainment of age 50 (45 for police & fire) while working in a qualifying position.	
<i>Termination Benefits</i>	<b>Non-Vested</b>	Payment of member's account balance.
	<b>Vested</b>	Same as normal (or early) retirement allowance, but commencement is deferred to normal (or early) retirement date.
<i>Optional Forms of Retirement Allowance</i>	<p>The normal form of benefit is a cash refund annuity (joint and two-thirds survivor contingent annuity for a married judge). All optional amounts are adjusted to be actuarially equivalent.</p> <p><b>Options Available</b></p> <p>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.</p>	
<i>Preretirement Death Benefit Eligibility</i>	<b>Judges</b>	Six or more years of service.
	<b>All others</b>	Death occurring while the member is an employee of a participating employer or within 120 days of termination provided the employee does not withdraw the account balance or retire, or a result of injuries received while in the service of a participating employer.
<i>Preretirement Death Benefit</i>	<b>Judges</b>	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.
	<b>All others</b>	<p>The member's account balance plus a matching employer amount.</p> <p>If the beneficiary is the member's spouse, they may instead elect to receive the following benefit:</p> <ul style="list-style-type: none"> <li>• If the member was eligible for retirement, the actuarial equivalent of the retirement benefit the member was eligible to receive at date of death.</li> <li>• 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.</li> </ul>



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<i>Additional Police &amp; Fire Death Benefits</i>	Upon the death of a retired police officer or firefighter, the surviving spouse or dependent children under age 18 will receive a monthly benefit based on 25% of the cash refund retirement allowance due to police and fire service.	
<i>Disability Benefit Eligibility</i>	<b>Duty</b>	Disability occurring as a direct result of a job-related injury or illness, regardless of length of service.
	<b>Non-Duty</b>	Disability occurring after ten years of service (six years, if a judge), but prior to normal retirement eligibility.
<i>Disability Benefits</i>	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.	
	<b>Fire and Police Members' Alternative</b>	
	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.	
	<b>Minimum Monthly Retirement Allowance</b>	
	<b>Judges</b>	45% of final average monthly salary.
	<b>All others</b>	\$100 for a member with at least 15 years of creditable service, actuarially reduced if an optional form of benefit is chosen.
	<b>Reduction of Benefits</b>	
	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.	
<i>Waiting Time Service Purchases</i>	Members with at least 10 years of combined credited and/or prior service under PERS may elect to purchase service credit for the six-month "waiting time" period worked prior to establishing membership in the system. The waiting time purchase is interest-free and must be purchased in one payment prior to retirement.	
<i>Police &amp; Fire Unit Purchases</i>	Police & fire members may purchase 60-month annuity benefits (up to \$80 per month) that must be paid out by age 65 and cannot commence prior to the earliest retirement age. The amount purchased by the member is matched by the employer. In certain situations, such as termination of employment prior to retiring, or working beyond age 65, the employer's matching purchase is forfeited.	
<i>Automatic Postretirement Cost of Living Adjustments (COLAs)</i>	All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in <i>Moro v. State of Oregon</i> , automatic postretirement adjustments are based on a blended COLA as described below.	
	<b>Automatic COLA prior to SB 822 and SB 861</b>	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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	<p><b>Automatic Adjustments Provided by Senate Bills 822 and 861</b></p> <p><b>Blended COLA after Moro decision</b></p>	<p>This legislation, passed in 2013, provided for that benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first \$60,000 of annual benefit and 0.15% on amounts above \$60,000 of annual benefit.</p> <p>The Supreme Court decision in <i>Moro</i> requires that members “will be entitled to receive during retirement a blended COLA rate that reflects the different COLA provisions applicable to benefits earned at different times.” The Supreme Court did not articulate a specific methodology for determining the blended COLA. For purposes of this valuation, we have determined the blend based on creditable service earned before and after October 2013. This approach is consistent with OAR 459-005-0510 adopted by the PERS Board in September 2015.</p>
<p><i>Ad Hoc Adjustments</i></p>		<p>From time to time, as granted by the Legislature, retired members and beneficiaries have received increases in their monthly benefits.</p>
<p><i>Variable Annuity Program</i></p>	<p><b>Contributions</b></p> <p><b>Benefit</b></p>	<p>Prior to January 1, 2004, members could elect to have 25, 50 or 75 percent of their contributions invested in the variable account.</p> <p>At retirement, members may elect to receive a variable annuity with the funds accumulated in their variable account.</p> <p>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.</p> <p>The employer-provided benefit, however, is based on the earnings the member would have received in the regular account.</p>
<p><i>Interest Credit on Member Accounts</i></p>	<p><b>Tier One Regular</b></p> <p><b>Tier Two Regular</b></p> <p><b>Variable</b></p>	<p>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.</p> <p>Amount determined by the Board based on actual investment earnings of the regular account.</p> <p>Actual earnings in variable account.</p>
<p><i>Retiree Healthcare – Medicare Supplement (RHIA)</i></p>	<p><b>Retiree Eligibility</b></p>	<p>All of the following must be met:</p> <ul style="list-style-type: none"> <li>(a) Currently receiving a retirement allowance from the System,</li> <li>(b) Covered for eight years before retirement,</li> <li>(c) Enrolled in a PERS-sponsored health plan, and</li> <li>(d) Enrolled in both Medicare Part A and Part B.</li> </ul>



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	<b>Surviving Spouse or Dependent Eligibility</b>	A surviving spouse or dependent of a deceased RHIA-eligible retiree is eligible for RHIA benefits if they are enrolled in both Medicare Part A and Part B, and <i>either</i> of the following criteria are met:  (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.																
	<b>Benefit Amount</b>	A monthly contribution of up to \$60 per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.																
<i>Retiree Healthcare – Under Age 65 (RHIPA)</i>	<b>Retiree Eligibility</b>	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.																
	<b>Surviving Spouse or Dependent Eligibility</b>	A surviving spouse or dependent of a deceased RHIPA-eligible retiree is eligible for RHIPA benefits if they are not yet eligible for Medicare, and <i>either</i> of the following criteria are met:  (a) Currently receiving a retirement allowance from the System, or  (b) The surviving spouse or dependent was covered under the eligible retiree's PERS-sponsored health plan at the time of the retiree's death and the deceased retiree retired on or after September 29, 1991.																
	<b>Benefit</b>	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 2023 is \$474.90 per month.																
		<table border="1"> <thead> <tr> <th>Years of Service with State Employer</th> <th>Subsidized Amount</th> </tr> </thead> <tbody> <tr> <td>Under 8</td> <td>0%</td> </tr> <tr> <td>8-9</td> <td>50%</td> </tr> <tr> <td>10-14</td> <td>60%</td> </tr> <tr> <td>15-19</td> <td>70%</td> </tr> <tr> <td>20-24</td> <td>80%</td> </tr> <tr> <td>25-29</td> <td>90%</td> </tr> <tr> <td>30 &amp; Over</td> <td>100%</td> </tr> </tbody> </table>	Years of Service with State Employer	Subsidized Amount	Under 8	0%	8-9	50%	10-14	60%	15-19	70%	20-24	80%	25-29	90%	30 & Over	100%
Years of Service with State Employer	Subsidized Amount																	
Under 8	0%																	
8-9	50%																	
10-14	60%																	
15-19	70%																	
20-24	80%																	
25-29	90%																	
30 & Over	100%																	

*Changes in Plan Provisions* There were no changes in the Tier One/Tier Two benefit provisions reflected since the December 31, 2021 actuarial valuation.



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

Summary of Chapter 238A Provisions — OPSRP

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



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<i>Preretirement Death Benefit</i>	<p>If the member was eligible for retirement, the actuarial equivalent of the retirement benefit the member was eligible to receive at date of death.</p> <p>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.</p>	
<i>Disability Benefit Eligibility</i>	<b>Duty</b>	Disablement occurring as a direct result of a job-related injury or illness, regardless of length of service.
	<b>Non-Duty</b>	Disablement occurring after ten years of service, but prior to normal retirement eligibility.
<i>Disability Benefit Amounts</i>	<b>Preretirement Benefit</b>	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.
	<b>Retirement Benefit</b>	Same formula as Normal Retirement Benefit, except: Final average salary is adjusted to reflect cost-of-living increases from date of disability to normal retirement age, and Retirement credits continue to accrue from date of disability to normal retirement age.
<i>Postretirement Adjustments</i>	<p>All monthly pension and annuity benefits except unit purchases are eligible for postretirement adjustments. As a result of the Senate Bills 822 and 861 and the Oregon Supreme Court decision in <i>Moro v. State of Oregon</i>, automatic postretirement adjustments are based on a blended COLA as described below.</p>	
	<b>Automatic COLA prior to SB 822 and SB 861</b>	<p>Benefits were adjusted annually to reflect the increase or decrease in the Consumer Price Index (Portland area - all items) as published by the Bureau of Labor Statistics.</p> <p>The maximum adjustment to be made for any year was 2% of the previous year's benefit. Any CPI change in excess of the limit was accumulated for future benefit adjustments which would otherwise be less than the limit. No benefit was decreased below its original amount.</p>
	<b>Automatic Adjustments Provided by Senate Bills 822 and 861</b>	This legislation, passed in 2013, provided that prospectively benefits would be increased annually based on a marginal rate schedule. The increase is calculated as 1.25% on the first \$60,000 of annual benefit and 0.15% on amounts above \$60,000 of annual benefit.
<i>Changes in Plan Provisions</i>	There were no changes in the OPSRP benefit provisions reflected since the December 31, 2021 actuarial valuation.	



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A large, white, three-dimensional number '5' is centered on a textured, brown and gold background that resembles wood grain or stone. The background is partially obscured by a white, curved shape that looks like a page being turned.

**Statistical  
Section**



## STATISTICAL NOTES

The Statistical section 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 PERS' information systems.

## FINANCIAL TRENDS

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

The Schedules of 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 PERS 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 nine 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, 2023, 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		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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	160,309,347	2,161,450,927	17.67	18,998,415,630	21,320,175,904
2022	160,097,904	4,030,158,539	31.14	789,784,656	4,980,041,099
2023	167,473,325	2,392,962,472	16.55	2,904,087,715	5,464,523,512

**Employee Pension Stability Accounts (included in Defined Benefit Pension Plan above)**

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2021	\$ 150,427,846	N/A	N/A	\$ 22,744,173	\$ 173,172,019
2022	152,691,859	N/A	N/A	24,233,448	176,925,307
2023	158,831,428	N/A	N/A	13,727,469	172,558,897

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

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2022	630,155,422	N/A	N/A	(218,607,143)	411,548,279
2023	692,611,666	N/A	N/A	512,596,403	1,205,208,069

**Deferred Compensation Plan**

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2022	195,637,308	N/A	N/A	(348,864,446)	(153,227,138)
2023	186,009,988	N/A	N/A	285,740,030	471,750,018

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

**Defined Benefit Pension Plan**

Fiscal Year	Benefits		Administrative Expenses		Refunds		Total
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		59,084,400		11,934,465	5,308,156,460
2022		5,468,215,109		58,696,368		14,893,205	5,541,804,682
2023		5,668,630,782		67,655,020		10,172,498	5,746,458,300

**Employee Pension Stability Accounts (included in Defined Benefit Pension Plan above)**

Fiscal Year	Benefits		Administrative Expenses		Transfers		Total
2021	\$	-	\$	480	\$	-	\$ 480
2022		-		528		18,089,202	18,089,730
2023		-		528		21,284,064	21,284,592

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

Fiscal Year	Benefits		Administrative Expenses		Refunds		Total
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
2022		744,712,857		12,158,259		N/A	756,871,116
2023		661,979,840		14,037,830		N/A	676,017,670

**Deferred Compensation Plan**

Fiscal Year	Benefits		Administrative Expenses		Refunds		Total
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
2022		161,003,068		1,834,870		N/A	162,837,938
2023		164,423,617		2,108,236		N/A	166,531,853

**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	
				Beginning of Year	End of Year
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	21,320,175,904	5,308,156,460	16,012,019,444	68,319,296,993	84,331,316,437
2022	4,980,041,099	5,541,804,682	(561,763,583)	84,331,316,437	83,769,552,854
2023	5,464,523,512	5,746,458,300	(281,934,788)	83,769,552,854	83,487,618,066

**Employee Pension Stability Accounts (included in Defined Benefit Pension Plan above)**

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year <sup>1</sup>	End of Year
2021	\$ 173,172,019	\$ 480	\$ 173,171,539	\$ -	\$ 173,171,539
2022	176,925,307	18,089,730	158,835,577	173,171,539	332,007,116
2023	172,558,897	21,284,592	151,274,305	328,688,942	479,963,247

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

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
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
2022	411,548,279	756,871,116	(345,322,837)	12,791,008,510	12,445,685,673
2023	1,205,208,069	676,017,670	529,190,399	12,445,685,673	12,974,876,072

**Deferred Compensation Plan**

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
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
2022	(153,227,138)	162,837,938	(316,065,076)	2,821,753,374	2,505,688,298
2023	471,750,018	166,531,853	305,218,165	2,505,688,298	2,810,906,463

<sup>1</sup> Beginning Net Position of Employee Pension Stability Account funds restated as of 7/1/2022.

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

**Retirement Health Insurance Account**

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2022	N/A	2,458,525	0.02	7,546,640	10,005,165
2023	N/A	2,138,751	0.01	25,157,762	27,296,513

**Retiree Health Insurance Premium Account**

Fiscal Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2022	N/A	8,264,936	0.20	764,731	9,029,667
2023	N/A	8,782,913	0.19	3,036,401	11,819,314

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

**Retirement Health Insurance Account**

<b>Fiscal Year</b>	<b>Benefits<sup>1</sup></b>	<b>Administrative Expenses</b>	<b>Refunds</b>	<b>Total</b>
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
2022	30,609,060	1,604,127	N/A	32,213,187
2023	29,793,960	1,651,347	N/A	31,445,307

**Retiree Health Insurance Premium Account**

<b>Fiscal Year</b>	<b>Benefits<sup>1</sup></b>	<b>Administrative Expenses</b>	<b>Refunds</b>	<b>Total</b>
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
2022	3,432,236	665,569	N/A	4,097,805
2023	3,007,586	741,986	N/A	3,749,572

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	End of Year
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
2022	10,005,165	32,213,187	(22,208,022)	752,907,709	730,699,687
2023	27,296,513	31,445,307	(4,148,794)	730,699,687	726,550,893

**Retiree Health Insurance Premium Account**

Fiscal Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
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
2022	9,029,667	4,097,805	4,931,862	78,395,944	83,327,806
2023	11,819,314	3,749,572	8,069,742	83,327,806	91,397,548

**Additions by Source - Retirement Programs**  
**For the Last Ten Years Ended December 31<sup>1</sup>:**

**Defined Benefit Pension Plan**

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2021	10,187,455	3,461,593,218	27.32	14,711,614,436	18,183,395,109
2022	8,399,524	2,832,016,309	20.87	(1,569,734,668)	1,270,681,165

**Employee Pension Stability Accounts**

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
2020	\$ 62,303,384	\$ N/A	N/A	\$ 5,109,277	\$ 67,412,661
2021	162,137,599	N/A	N/A	44,889,059	207,026,659
2022	153,839,722	N/A	N/A	(7,147,877)	146,691,844

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

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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	825,974,438	1,461,134,172
2021	600,925,794	N/A	N/A	1,887,877,326	2,488,803,120
2022	651,488,270	N/A	N/A	(567,554,132)	83,934,138

**Deferred Compensation Plan**

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2021	167,423,263	N/A	N/A	286,846,437	454,269,699
2022	182,916,729	N/A	N/A	(413,703,802)	(230,787,073)

<sup>1</sup>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<sup>1</sup>:**

**Defined Benefit Pension Plan**

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
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
2021	5,340,818,040	60,156,727	15,529,724	(9,927,633)	5,406,576,858
2022	5,584,370,250	61,736,752	14,218,421	(18,658,112)	5,641,667,310

**Employee Pension Stability Accounts**

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
2020	\$ -	\$ 240	N/A	\$ 741,278	\$ 741,518
2021	-	504	N/A	9,927,633	9,928,137
2022	-	-	N/A	18,658,112	18,658,112

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

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
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
2021	708,475,122	12,572,339	N/A	N/A	721,047,461
2022	691,335,584	13,705,078	N/A	N/A	705,040,662

**Deferred Compensation Plan**

Calendar Year	Benefits	Administrative Expenses	Refunds	Intracount Transfers	Total
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
2021	145,991,333	2,154,367	N/A	N/A	148,145,700
2022	148,180,097	2,622,092	N/A	N/A	150,802,188

<sup>1</sup>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<sup>1</sup>:**

**Defined Benefit Pension Plan**

Calendar Year	Additions	Deductions <sup>2</sup>	Net Change	Net Position <sup>3</sup>	
				Beginning of Year	End of Year
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
2021	18,183,395,109	5,406,576,858	12,776,818,251	73,564,887,444	86,341,705,695
2022	1,270,681,165	5,641,667,310	(4,370,986,144)	86,341,705,695	81,970,719,551

**Employee Pension Stability Account**

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
2020	\$ 67,412,661	\$ 741,518	\$ 66,671,143	\$ -	\$ 66,671,143
2021	207,026,659	9,928,137	197,098,521	66,671,143	263,769,664
2022	146,691,844	18,658,112	128,033,732	263,769,664	391,803,396

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

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
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	1,461,134,172	667,858,348	793,275,824	10,391,867,121	11,185,142,945
2021	2,488,803,120	721,047,461	1,767,755,659	11,185,142,945	12,952,898,604
2022	83,934,138	705,040,662	(621,106,524)	12,952,898,604	12,331,792,080

**Deferred Compensation Plan**

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
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
2021	454,269,699	148,145,700	306,124,000	2,585,472,372	2,891,596,372
2022	(230,787,073)	150,802,188	(381,589,261)	2,891,596,372	2,510,007,111

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

<sup>2</sup>Balances are restated for calendar years 2013 to 2015 due to prior period adjustments.

<sup>3</sup>Balances restated for calendar years 2013, 2014, and 2017 to correct amounts.

**Additions by Source - OPEB**

For the Last Ten Years Ended December 31<sup>1</sup>:

**Retirement Health Insurance Account**

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2021	N/A	2,605,114	0.02	132,841,555	135,446,669
2022	N/A	2,162,912	0.02	(13,447,094)	(11,284,182)

**Retiree Health Insurance Premium Account**

Calendar Year	Member Contributions	Employer Contributions		Net Investment and Other Income	Total
		Dollars	Percent of Annual Covered Payroll		
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
2021	N/A	10,144,057	0.26	13,179,625	23,323,682
2022	N/A	8,420,382	0.20	(1,488,040)	6,932,342

<sup>1</sup>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<sup>1</sup>:**Retirement Health Insurance Account**

<b>Calendar Year</b>		<b>Benefits</b>	<b>Administrative Expenses</b>	<b>Refunds</b>		<b>Total</b>
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
2021		31,052,710	1,413,606	N/A		32,466,316
2022		30,288,780	1,640,873	N/A		31,929,653

**Retiree Health Insurance Premium Account**

<b>Calendar Year</b>		<b>Benefits</b>	<b>Administrative Expenses</b>	<b>Refunds</b>		<b>Total</b>
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
2021		3,553,564	436,931	N/A		3,990,495
2022		3,242,885	721,597	N/A		3,964,482

<sup>1</sup>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<sup>1</sup>:**

**Retirement Health Insurance Account**

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
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
2021	135,446,669	32,466,316	102,980,354	660,214,551	763,194,905
2022	(11,284,182)	31,929,653	(43,213,834)	763,194,905	719,981,070

**Retiree Health Insurance Premium Account**

Calendar Year	Additions	Deductions	Net Change	Net Position	
				Beginning of Year	End of Year
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
2021	23,323,682	3,990,495	19,333,187	63,567,184	82,900,371
2022	6,932,342	3,964,482	2,967,860	82,900,371	85,868,231

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

**Schedule of Earnings and Crediting  
at December 31<sup>1</sup>:**

Calendar Year	Credited					
	Tier One Earnings Available for Crediting	Tier One	Tier Two	Variable Earnings/ (Loss) Credited	Individual Account Program	
2013	15.76	8.00	15.62	25.74		15.59
2014	7.24	7.75	7.24 <sup>2</sup>	4.29 <sup>3</sup>		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
2021	20.14	7.20	20.14	18.88		16.18
2022	(1.91)	6.90	(1.91)	(21.52)		(4.27)

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

<sup>2</sup>Earnings rate includes allocation from settlement of *Murray v. PERB* litigation.

<sup>3</sup>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		Retirement Benefit Totals	Death Benefits	Refunds		Total
		Duty	Non-Duty			Normal	Death	
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	5,232,215,032	4,922,561	4,721,963	7,212,502	5,249,072,058
2022	5,312,844,561	22,366,119	127,272,097	5,462,482,777	5,732,332	4,984,900	9,908,305	5,483,108,314
2023	5,513,738,363	23,575,973	127,225,545	5,664,539,881	4,090,901	1,284,335	8,888,163	5,678,803,280

**Schedule of Average OPEB Benefits for Retirement Health Insurance Account<sup>1</sup>  
For the Fiscal Year Ended June 30, 2023:**

Years Credited Service	8+
Average Monthly Benefit	\$60.00
Final Average Salary	N/A
Number of Active Retirees	40,703

**Schedule of Average OPEB Benefits for Retiree Health Insurance Premium Account<sup>1</sup>  
For the Fiscal Year Ended June 30, 2023:**

	Years Credited Service						Total
	8 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 +	
Average Monthly Benefit	\$ 237	\$ 285	\$ 332	\$ 380	\$ 427	\$ 475	\$ 446
Final Average Salary	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of Active Retirees	1	10	17	52	118	331	529

<sup>1</sup> 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, 2013 to June 30, 2023	Years of Credited Service							Total
	0-5	6-10	11-15	16-20	21-25	26-30	31+	
2014 Average Monthly Benefit	\$831	\$1,187	\$1,559	\$1,988	\$2,762	\$3,980	\$5,823	\$2,726
Final Average Salary	\$3,567	\$3,656	\$4,345	\$5,006	\$5,908	\$6,402	\$6,947	\$5,306
Number of Active Retirees	383	1,001	1,092	1,195	1,398	1,217	918	7,204
2015 Average Monthly Benefit	\$682	\$925	\$1,387	\$1,918	\$2,581	\$3,807	\$5,690	\$2,504
Final Average Salary	\$3,932	\$3,822	\$4,543	\$5,180	\$5,799	\$6,559	\$7,358	\$5,427
Number of Active Retirees	287	814	975	1,090	1,134	1,087	639	6,026
2016 Average Monthly Benefit	\$775	\$965	\$1,363	\$1,946	\$2,569	\$3,759	\$5,666	\$2,599
Final Average Salary	\$3,568	\$3,818	\$4,528	\$5,221	\$5,895	\$6,830	\$7,332	\$5,550
Number of Active Retirees	328	837	981	1,110	1,229	1,288	798	6,571
2017 Average Monthly Benefit	\$742	\$1,078	\$1,428	\$1,914	\$2,695	\$3,738	\$5,713	\$2,713
Final Average Salary	\$3,653	\$3,863	\$4,567	\$5,444	\$6,215	\$7,028	\$8,109	\$5,841
Number of Active Retirees	367	888	1,066	1,182	1,164	1,367	1,035	7,069
2018 Average Monthly Benefit	\$834	\$1,094	\$1,382	\$1,860	\$2,684	\$3,634	\$5,400	\$2,603
Final Average Salary	\$3,926	\$3,994	\$4,419	\$5,435	\$6,389	\$7,077	\$8,040	\$5,867
Number of Active Retirees	348	935	1,042	1,330	1,209	1,488	949	7,301
2019 Average Monthly Benefit	\$869	\$1,004	\$1,311	\$1,915	\$2,733	\$3,698	\$5,267	\$2,469
Final Average Salary	\$4,004	\$3,949	\$4,570	\$5,599	\$6,552	\$7,408	\$8,343	\$5,906
Number of Active Retirees	406	962	1,007	1,202	1,106	1,263	732	6,678
2020 Average Monthly Benefit	\$827	\$996	\$1,241	\$1,813	\$2,765	\$3,853	\$5,157	\$2,527
Final Average Salary	\$3,921	\$4,160	\$4,558	\$5,462	\$6,858	\$7,935	\$8,547	\$6,150
Number of Active Retirees	396	889	1,095	1,139	1,259	1,224	887	6,889
2021 Average Monthly Benefit	\$721	\$1,017	\$1,274	\$1,842	\$2,729	\$3,845	\$4,990	\$2,511
Final Average Salary	\$4,050	\$4,120	\$4,579	\$5,709	\$6,781	\$8,036	\$8,198	\$6,169
Number of Active Retirees	397	836	909	1,112	1,243	1,164	808	6,469
2022 Average Monthly Benefit	\$762	\$966	\$1,221	\$1,669	\$2,726	\$3,869	\$4,919	\$2,502
Final Average Salary	\$4,594	\$4,426	\$5,000	\$5,597	\$6,964	\$8,196	\$8,667	\$6,453
Number of Active Retirees	378	932	1,089	1,196	1,371	1,318	982	7,266
2023 Average Monthly Benefit	\$820	\$985	\$1,250	\$1,763	\$2,727	\$4,087	\$4,849	\$2,542
Final Average Salary	\$4,575	\$4,533	\$4,912	\$5,763	\$7,189	\$8,791	\$8,849	\$6,635
Number of Active Retirees	411	887	850	986	1,274	1,157	838	6,403

**Schedule of Benefit Recipients by Benefit Type  
For the Fiscal Year Ended June 30, 2023**

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	17,031	13,696	42	67	2,700	526	849	6,217	5,444	947	714	1,339	1,237	284
501-1,000	22,266	18,560	65	373	2,515	753	1,785	8,136	7,542	1,794	1,209	839	759	202
1,001-1,500	18,717	15,563	72	481	1,916	685	1,542	6,308	6,797	1,694	912	647	634	183
1,501-2,000	16,106	13,451	54	470	1,590	541	1,306	5,001	6,127	1,615	783	508	627	139
2,001-2,500	14,196	12,064	53	441	1,243	395	1,142	4,181	5,507	1,493	647	491	596	139
2,501-3,000	12,567	10,829	66	360	1,030	282	1,013	3,504	5,021	1,296	520	459	641	113
3,001-3,500	10,631	9,275	49	307	776	224	825	2,890	4,398	1,234	419	329	446	90
3,501-4,000	9,350	8,352	55	179	647	117	704	2,555	3,948	1,133	374	225	343	68
4,001-4,500	8,111	7,329	39	134	532	77	623	2,123	3,628	1,036	320	143	188	50
4,501-5,000	6,953	6,360	29	99	424	41	470	1,822	3,235	922	281	94	97	32
5,001-5,500	6,203	5,738	28	51	349	37	435	1,610	2,903	864	234	47	83	27
5,501-6,000	5,192	4,801	13	42	314	22	331	1,309	2,502	774	177	23	59	17
6,000+	16,214	15,042	39	61	1,022	50	915	3,623	7,883	3,059	512	68	128	26
<b>Totals</b>	<b>163,537</b>	<b>141,060</b>	<b>604</b>	<b>3,065</b>	<b>15,058</b>	<b>3,750</b>	<b>11,940</b>	<b>49,279</b>	<b>64,935</b>	<b>17,861</b>	<b>7,102</b>	<b>5,212</b>	<b>5,838</b>	<b>1,370</b>

\* 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 <sup>1</sup>	\$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

<sup>1</sup> Fiduciary Funds only.

**Schedule of Retirement System Membership  
at June 30:**

Five Year Increments	2015	2016	2017	2018	2019	2020	2021	2022	2023
	State Agencies	47,620	47,868	48,099	48,320	49,699	49,506	51,340	50,782
School Districts	66,434	68,648	69,510	71,238	73,164	72,258	71,894	73,911	76,767
Political Subdivisions <sup>2</sup>	54,536	55,160	55,696	56,439	53,464	56,913	56,864	56,247	58,669
Inactive Members	44,786	45,925	45,709	45,993	48,786	46,530	48,384	51,814	53,100
Total Non-Retired	213,376	217,601	219,014	221,990	225,113	225,207	228,482	232,754	241,836
Retired Members and Beneficiaries	132,506	136,435	136,435	145,863	149,386	153,622	156,500	160,326	163,537
Total Membership	345,882	354,036	355,449	367,853	374,499	378,829	384,982	393,080	405,373
Administrative Expense <sup>1</sup>	\$45,791,942	\$51,763,886	\$55,931,659	\$53,090,243	\$54,880,713	\$63,911,998	\$75,910,699	\$74,959,193	\$86,194,363
Pension Roll (one month)	\$317,090,746	\$337,405,252	\$355,414,652	\$376,397,537	\$382,187,402	\$399,447,944	\$416,186,453	\$432,881,154	\$448,255,253

<sup>1</sup> Fiduciary Funds only.

<sup>2</sup> Includes Community Colleges

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

	2023			2014		
	Number of Current Employees	Rank	Percent of Total System	Number of Current Employees	Rank	Percent of Total System
State of Oregon	53,300	1	28.24 %	45,774	1	27.75 %
Portland Public Schools	6,402	2	3.39	5,225	2	3.17
Portland, City of	5,710	3	3.03	4,398	6	2.67
Salem-Keizer Public Schools	5,604	4	2.97	4,669	3	2.83
Multnomah County	5,201	5	2.76	4,515	5	2.74
Beaverton School District	4,808	6	2.55	3,924	7	2.38
Oregon Health & Science University	3,683	7	1.95	4,582	4	2.78
Hillsboro School District #1J	2,489	8	1.32	2,287	8	1.39
North Clackamas School District #12	2,166	9	1.15	2,000	9	1.21
Eugene School District #4J	2,154	10	1.14	1,900	10	1.15
All Others*	97,219		51.51	85,700		51.96
<b>Total</b>	<b>188,736</b>		<b>100.00 %</b>	<b>164,974</b>		<b>100.03 %</b>

\* "All Others" consisted of:

Counties	14,212	7.53 %	12,267	7.44 %
Municipalities	13,878	7.36	12,247	7.43
School Districts	53,144	28.17	44,819	27.17
Community Colleges	7,220	3.83	8,348	5.06
Other Political Subdivisions	8,765	4.64	8,019	4.86
<b>Total All Others</b>	<b>97,219</b>	<b>51.51 %</b>	<b>85,700</b>	<b>51.96 %</b>

## PERS-PARTICIPATING EMPLOYERS BY COUNTY, ACCORDING TO MAILING ADDRESS (897)

Baker (11)  
Baker City, City of  
Baker County  
Baker County Library District  
Baker School District #5J  
Baker Valley Irrigation District  
Baker Web Academy  
Burnt River High School  
Burnt River Irrigation District  
Huntington School District #16J  
Huntington, City of  
Pine-Eagle School District #6I

Benton (15)  
Adair RFPD  
Adair Village, City of  
Alsea School  
Benton County  
Corvallis School District #509J  
Corvallis, City of  
Kings Valley Charter School  
Monroe Fire Department  
Monroe School District #1J  
Monroe, City of  
Muddy Creek Charter School  
Oregon State University  
Philomath Fire Department  
Philomath School District #17J  
Philomath, City of

Clackamas (54)  
Alliance Charter Academy  
Canby Fire District  
Canby School District  
Canby Utility Board  
Canby, City of  
Cascade Heights Public Charter School  
City County Insurance Services  
Clackamas Community College  
Clackamas County  
Clackamas County ESD  
Clackamas County Fair  
Clackamas County Fire District 1  
Clackamas County Vector Control District  
Clackamas Middle College  
Clackamas River Water  
Clackamas River Water Providers  
Clackamas Web Academy  
Colton Fire Department  
Colton School District #53  
Estacada Cemetery Maintenance District  
Estacada Fire Department  
Estacada School District #108  
Estacada, City of  
Gladstone School District #115  
Gladstone, City of  
Happy Valley, City of  
Harmony Academy  
Hoodland Fire District #74  
Housing Authority of Clackamas County  
Lake Oswego School District  
Lake Oswego, City of  
Milwaukie, City of  
Molalla RFPD #73

Molalla River Academy  
Molalla River School District  
Molalla, City of  
Mulino Water District #23  
North Clackamas County Water Commission  
North Clackamas School District #12  
Oak Lodge Water Services District  
Oregon City School District #62  
Oregon City, City of  
Oregon Trail School District #46  
Renaissance Public Academy  
Sandy Fire Department  
Sandy, City of  
South Fork Water Board  
Springwater Environmental Sciences School  
Summit Learning Charter  
Sunrise Water Authority  
Three Rivers Charter School  
West Linn School District  
West Linn, City of  
Wilsonville, City of

Clatsop (17)  
Arch Cape Water/Sanitary District  
Astoria, City of  
Cannon Beach Academy  
Cannon Beach RFPD  
Cannon Beach, City of  
Clatsop Community College  
Clatsop County  
Clatsop County School District #1C  
Gearhart, City of  
Jewell School District #8  
Knappa School District #4  
Knappa Svensen Burnside RFPD  
Port of Astoria  
Seaside Schools  
Warrenton, City of  
Warrenton-Hammond School District  
Wickiup Water District

Columbia (27)  
Clatskanie Library District  
Clatskanie People's Utility District  
Clatskanie RFPD  
Clatskanie School District #6J  
Clatskanie, City of  
Columbia City, City of  
Columbia County  
Columbia County 911 Communications District  
Columbia Drainage Vector Control District  
Columbia River Fire and Rescue  
Columbia River People's Utility District  
Greater St. Helens Aquatic District  
Mist-Birkenfeld RFPD  
Port of Columbia County  
Rainier Cemetery District  
Rainier School District #13  
Rainier, City of  
Scappoose Public Library  
Scappoose RFPD  
Scappoose School District

Scappoose, City of  
South Columbia Family School  
St. Helens School District #502  
St. Helens, City of  
Vernonia Fire  
Vernonia School District  
Vernonia, City of

Coos (27)  
Bandon School District  
Bandon, City of  
Central Coos Fire and Rescue  
Charleston RFPD  
Coos Bay School District #9  
Coos Bay, City of  
Coos County  
Coos County Airport District  
Coquille School District #8  
Coquille, City of  
Lakeside Water District  
Lakeside, City of  
Millington RFPD  
Myrtle Point School District #41  
Myrtle Point, City of  
North Bay RFPD  
North Bend City Housing Authority  
North Bend Public Schools  
North Bend, City of  
Oregon Dungeness Crab Commission  
Oregon Virtual Academy  
Port of Coos Bay  
Powers School District  
Powers, City of  
South Coast ESD Region #7  
Southwestern Oregon Community College  
The Lighthouse School

Crook (7)  
Crook County  
Crook County RFPD 1  
Crook County School District  
Insight School of Oregon Painted Hills  
Ochoco Irrigation District  
Powell Butte Community Charter School  
Prineville, City of

Curry (13)  
Brookings, City of  
Brookings-Harbor School District #17C  
Central Curry School District #1  
Chetco Community Public Library Board  
Curry County  
Curry Public Library  
Gold Beach, City of  
Harbor Water People's Utility District  
Nesika Beach-Ophir Water District  
Oregon Trawl Commission  
Port Orford Public Library District  
Port Orford, City of  
Port Orford-Langlois School District #2CJ

Deschutes (27)

Bend International School  
 Bend Parks and Recreation  
 Bend, City of  
 Bend-La Pine Schools  
 Black Butte Ranch Police  
 Black Butte Ranch RFPD  
 Central Oregon Community College  
 Central Oregon Intergovernmental Council  
 Central Oregon Irrigation District  
 Central Oregon Regional Housing Authority  
 Cloverdale RFPD  
 Deschutes County  
 Deschutes Public Library District  
 Desert Sky Montessori  
 High Desert Education Service District  
 Jefferson County Soil and Water Conservation District  
 La Pine RFPD  
 Oregon Family School  
 Redmond Area Parks and Recreation District  
 Redmond Fire and Rescue  
 Redmond Proficiency Academy  
 Redmond School District #2J  
 Redmond, City of  
 Sisters and Camp Sherman RFPD  
 Sisters School District  
 Sisters, City of  
 Sunriver Service District

Douglas (39)  
 Camas Valley School District #21  
 Canyonville, City of  
 Days Creek School District #15  
 Douglas County  
 Douglas County ESD  
 Douglas County Fire District #2  
 Douglas County Soil and Water Conservation District  
 Drain, City of  
 Elkton School District #34  
 Elkton, City of  
 Glendale School District #77  
 Glide Fire Department  
 Glide School District #12  
 Myrtle Creek, City of  
 North Douglas County Fire and EMS  
 North Douglas School District #22  
 Oakland School District  
 Oakland, City of  
 Reedsport School District  
 Reedsport, City of  
 Riddle School District  
 Riddle, City of  
 Roseburg Public Schools  
 Roseburg Urban Sanitary Authority  
 Roseburg, City of  
 South Umpqua School District  
 Sutherlin School District #130  
 Sutherlin Water Control District  
 Sutherlin, City of  
 The Phoenix School  
 Tri-City Water and Sanitary Authority  
 Umpqua Community College  
 Winchester Bay Sanitary District  
 Winston, City of  
 Winston-Dillard Fire District  
 Winston-Dillard Schools  
 Winston-Dillard Water District

Yoncalla School District #32  
 Yoncalla, City of  
 Gilliam (6)  
 Arlington Public Schools  
 Condon Admin. School District #25J  
 Condon, City of  
 Gilliam County  
 Gilliam County Fire Services  
 North Central ESD

Grant (13)  
 Canyon City, Town of  
 Dayville School District #16J  
 Grant County  
 Grant County Emergency Communications Agency  
 Grant County ESD  
 John Day School District  
 John Day, City of  
 Long Creek Schools  
 Monument School District #8  
 Mount Vernon, City of  
 Oregon Connections Academy at Prairie City  
 Prairie City School District #4  
 Prairie City, City of

Harney (17)  
 Burns, City of  
 Crane Elementary School  
 Crane Union High School  
 Diamond School District #7  
 Double O School District  
 Drewsey School  
 Frenchglen School District  
 Harney County  
 Harney County School District #3  
 Harney ESD Region #17  
 Harney Hospital  
 High Desert Parks and Recreation District  
 Hines, City of  
 Pine Creek School  
 Silvies River Web Academy  
 South Harney School District #33  
 Suntex School District

Hood River (14)  
 Cascade Locks, City of  
 Crystal Springs Water District  
 East Fork Irrigation District  
 Farmers Irrigation District  
 Hood River County  
 Hood River County School District  
 Hood River, City of  
 Ice Fountain Water District  
 Odell Sanitary District  
 Parkdale Fire District  
 Port of Cascade Locks  
 Port of Hood River  
 West Side Fire District  
 Wy'East Fire District

Jackson (42)  
 Applegate Valley RFPD #9  
 Armadillo Technical Institute  
 Ashland Parks Commission  
 Ashland Public Schools  
 Ashland, City of  
 Butte Falls School District

Butte Falls, Town of  
 Central Point School District #6  
 Central Point, City of  
 Crater Lake Charter Academy  
 Eagle Point School District #9  
 Eagle Point, City of  
 Evans Valley Fire District #6  
 Gold Hill, City of  
 Housing Authority of Jackson County  
 Jackson County  
 Jackson County Fire District #3  
 Jackson County Fire District #4  
 Jackson County Fire District #5  
 Jackson County Vector Control  
 Jacksonville, City of  
 Logos Public Charter School  
 Madrone Trail Public Charter School  
 Medford Irrigation District  
 Medford School District #549C  
 Medford Water Commission  
 Medford, City of  
 Phoenix, City of  
 Phoenix-Talent School District #4  
 Pinehurst School  
 Prospect School District  
 River's Edge Academy Charter School  
 Rogue River Fire District  
 Rogue River School District  
 Rogue River Valley Irrigation District  
 Rogue River, City of  
 Shady Cove, City of  
 Southern Oregon ESD  
 Southern Oregon University  
 Talent Irrigation District  
 Talent, City of  
 The Valley School of Southern Oregon

Jefferson (13)  
 Ashwood School  
 Black Butte School District  
 Crooked River Ranch RFPD  
 Culver School District #4  
 Culver, City of  
 Deschutes Valley Water District  
 Jefferson County  
 Jefferson County ESD  
 Jefferson County Library District  
 Lake Chinook Fire and Rescue District  
 Madras School District  
 Madras, City of  
 Metolius, City of

Josephine (10)  
 Cave Junction, City of  
 Grants Pass Irrigation District  
 Grants Pass School District  
 Grants Pass, City of  
 Illinois Valley Fire District  
 Josephine County  
 Rogue Community College  
 Sunny Wolf Charter School  
 Three Rivers School District  
 Woodland Charter School

Klamath (20)  
 Central Cascades Fire & EMS  
 Chiloquin, City of  
 Chiloquin-Agency Lake RFPD  
 Crescent RFPD  
 EagleRidge High School  
 Horsefly Irrigation District

Keno RFPD  
Klamath Community College  
Klamath County  
Klamath County Emergency  
Communications District  
Klamath County Fire District #1  
Klamath County School District  
Klamath Falls City Schools  
Klamath Falls, City of  
Klamath Housing Authority  
Klamath Vector Control District  
Malin, City of  
Merrill, City of  
Oregon Institute of Technology  
South Suburban Sanitary District

Lake (9)  
Adel School District #21  
Lake County  
Lake County ESD  
Lake County Library District  
Lake County School District #7  
Lakeview, Town of  
North Lake School District #14  
Paisley School District  
Plush School District

Lane (54)  
Bethel School District  
Blachly School District  
Coburg Community Charter School  
Coburg RFPD  
Coburg, City of  
Cottage Grove, City of  
Creswell School District #40  
Creswell, City of  
Crow-Applegate-Lorane School District  
#66  
Dexter RFPD  
Dunes City, City of  
Eugene School District #4J  
Eugene Water and Electric Board  
Eugene, City of  
Fern Ridge Community Library  
Fern Ridge School District  
Florence, City of  
Junction City Fire Department  
Junction City School District #69  
Junction City, City of  
Lane Community College  
Lane Council of Governments  
Lane County  
Lane County ESD  
Lane Fire Authority  
Lane Regional Air Protection Agency  
Lowell RFPD  
Lowell School District  
Lowell, City of  
Mapleton School District  
Mapleton Water District  
Marcola School District #79  
McKenzie Fire and Rescue  
McKenzie School District  
Mohawk Valley Fire  
Oakridge School District  
Oakridge, City of  
Pleasant Hill Goshen Fire & Rescue  
Pleasant Hill School District  
Rainbow Water District  
Ridgeline Montessori  
Siuslaw Public Library

Siuslaw School District #97J  
South Lane County Fire and Rescue  
South Lane School District  
Springfield School District #19  
Springfield, City of  
TEACH-NW  
The Village School  
University of Oregon  
Veneta, City of  
West Lane Technical Learning Center  
Western Lane Fire and EMS Authority  
Westfir, City of

Lincoln (19)  
Central Oregon Coast Fire and Rescue  
District  
Depoe Bay RFPD  
Depoe Bay, City of  
Eddyville Charter School  
Lincoln City, City of  
Lincoln County  
Lincoln County School District  
Newport, City of  
North Lincoln Fire and Rescue District  
#1  
Oregon Coast Community College  
Port of Newport  
Seal Rock RFPD  
Seal Rock Water District  
Siletz Valley School  
Southwest Lincoln County Water  
District  
Toledo, City of  
Waldport, City of  
Yachats RFPD  
Yachats, City of

Linn (37)  
Albany, City of  
Brownsville RFPD  
Central Linn School District #552C  
Community Services Consortium  
Greater Albany Public Schools #8J  
Halsey, City of  
Halsey-Shedd RFPD  
Harrisburg Fire and Rescue  
Harrisburg School District #7  
Harrisburg, City of  
Lebanon Aquatic District  
Lebanon Community School District  
Lebanon Fire District  
Lebanon, City of  
Linn County  
Linn-Benton Community College  
Linn-Benton Housing Authority  
Linn-Benton-Lincoln ESD  
Lourdes Charter School  
Lyons Fire District  
Lyons, City of  
Mill City RFPD  
Mill City, City of  
Millersburg, City of  
Oregon Cascades West Council of  
Governments  
Oregon Charter Academy  
Sand Ridge Charter School  
Santiam Canyon School District  
Scio Fire District  
Scio School District #95C  
Sweet Home Cemetery Maintenance  
District

Sweet Home Charter School  
Sweet Home Fire and Ambulance  
District  
Sweet Home School District #55  
Sweet Home, City of  
Tangent RFPD  
Willamette Connections Academy

Malheur (22)  
Adrian School District #61  
Annex Elementary School  
Arock School District #81  
Four Rivers Community School  
Harper School District #66  
Jordan Valley School District #3  
Jordan Valley, City of  
Juntura Grade School  
Malheur County  
Malheur ESD Region #14  
Nyssa Road Assessment District #2  
Nyssa School District #26  
Nyssa, City of  
Ontario School District #8C  
Ontario, City of  
Owyhee Irrigation District  
Rural Road Assessment District #3  
Rural Road District #4  
Treasure Valley Community College  
Vale School District #84  
Vale, City of  
Valley View Cemetery Maintenance  
District

Marion (142)  
Appraiser Certification and Licensure  
Board  
Arock School District #81  
Aumsville RFPD  
Aumsville, City of  
Aurora RFPD  
Aurora, City of  
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  
Cascade School District #5  
Chemeketa Community College  
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	Oregon Government Ethics Commission	Corbett Water District
Department of Revenue	Oregon Health Authority	David Douglas School District
Department of State Lands	Oregon Hop Commission	Fairview, City of
Department of State Police	Oregon Housing and Community Services	Gresham, City of
Department of Transportation	Oregon Liquor & Cannabis Commission	Gresham-Barlow School District #10
Department of Veterans' Affairs	Oregon Municipal Electric Utilities Association	HOLLA School
District Attorneys Department	Oregon Parks and Recreation Department	Home Forward
Eagle Charter School	Oregon Patient Safety Commission	Kairos PDX
Employment Department	Oregon Racing Commission	Knova Learning Oregon
Employment Relations Board	Oregon School Boards Association	Le Monde French Immersion Public Charter School
Forestry Department	Oregon State Board of Nursing	Lewis and Clark Montessori Charter School
Frontier Charter Academy	Oregon State Library	Metro
Geology and Mineral Industries	Oregon Watershed Enhancement Board	Metro East Web Academy
Gervais School District #1	Oregon Youth Authority	Mount Hood Community College
Gervais, City of	Psychiatric Security Review Board	Multnomah County
Health Related Licensing Boards	Public Defense Services Commission	Multnomah County Drainage District
Higher Education Coordinating Commission	Public Employees Retirement System	Multnomah County RFPD #14
Howard Street Charter School, Inc.	Public Safety Standards and Training	Multnomah ESD
Hubbard RFPD	Public Utility Commission	Multnomah Learning Academy
Hubbard, City of	Real Estate Agency	Oregon Beef Council
Idanha-Detroit RFPD	Salem Housing Authority	Oregon Film and Video
Jefferson RFPD	Salem, City of	Oregon Health and Science University
Jefferson School District #14CJ	Salem-Keizer Public Schools	Oregon Potato Commission
Jefferson, City of	Secretary of State	Oregon Tourism Commission
Judges PERS	Silver Falls Library District	Oregon Wheat Commission
Judicial Department	Silver Falls School District	Parkrose School District
Keizer RFPD	Silverton RFPD #2	Physical Therapist Licensing Board
Keizer, City of	Silverton, City of	Port of Portland
Land Use Board of Appeals	St. Paul School District	Portland Community College
Landscape Contractors Board	State Accident Insurance Fund	Portland Development Commission
League of Oregon Cities	State Board of Clinical Social Workers	Portland Public Schools
Legislative Administration Committee	State Board of Tax Practitioners	Portland State University
Legislative Assembly	State Lottery Commission	Portland Village School
Legislative Committees	State Marine Board	Portland, City of
Legislative Fiscal Office	Stayton RFPD	Reynolds School District
Legislative Policy and Research Committee	Stayton, City of	Riverdale School
Long Term Care Ombudsman	Sublimity RFPD	Rockwood Water People's Utility District
Marion Area Multi-Agency Emergency Telecom Center	Suburban East Salem Water District	Sauvie Island School
Marion County	Teacher Standards and Practices Commission	The Cottonwood School of Civics and Science
Marion County Fire District #1	Travel Information Council	The Emerson School
Marion County Housing Authority	Turner Fire District	The Ivy School
Mental Health Regulatory Agency	Turner, City of	Troutdale, City of
Military Department	Valley Inquiry Charter School	West Multnomah Soil and Water Conservation District
Mount Angel Fire District	Water Resources Department	Wood Village, City of
Mount Angel School District #91	Willamette ESD	
Mount Angel, City of	Woodburn Fire District	
North Santiam School District #29J	Woodburn School District	
NorthWest Senior and Disability Services	Woodburn, City of	
Office of Legislative Counsel		Polk (16)
Office of the Governor	Morrow (10)	Central School District #13J
Office of the State Treasurer	Boardman RFPD	Dallas Community School
Oregon Advocacy Commissions Office	Boardman, City of	Dallas School District
Oregon Board of Dentistry	Community Counseling Solutions	Dallas, City of
Oregon Board of Massage Therapists	Heppner, City of	Falls City School District
Oregon Board of Medical Examiners	Irrigon, City of	Falls City, City of
Oregon Business Development Department	Morrow County	Independence, City of
Oregon Commission for the Blind	Morrow County Schools	Luckiamute Valley Charter School
Oregon Community College Association	North Morrow Vector Control District	Monmouth, City of
Oregon Corrections Enterprises	Oregon Trail Library District	Perrydale School District #21
Oregon Criminal Justice Commission	West Extension Irrigation District	Polk County
Oregon Department of Emergency Management		Polk County Fire District #1
Oregon Department of Fish and Wildlife	Multnomah (48)	Polk Soil and Water Conservation District
Oregon Forest Resources Institute	Arthur Academy Charter School	Southwestern Polk County RFPD
	Centennial School District #28	West Valley Housing Authority
	Center for Advanced Learning	Western Oregon University
	Corbett School District #39	
		Sherman (3)
		Moro, City of

Sherman County  
Sherman County School District

Tillamook (26)  
Bay City, City of  
Fairview Water District  
Garibaldi, City of  
Manzanita, City of  
Neah-Kah-Nie School District  
Nehalem Bay Fire and Rescue  
Nehalem Bay Health District  
Nehalem Bay Wastewater Agency  
Neskowin Regional Sanitary Authority  
Neskowin Regional Water District  
Nestucca RFPD  
Nestucca Valley School District #101  
Netarts Water District  
Netarts-Oceanside RFPD  
Netarts-Oceanside Sanitary District  
Port of Garibaldi  
Port of Tillamook Bay  
Rockaway Beach, City of  
Tillamook Bay Community College  
Tillamook County Emergency  
Communications District  
Tillamook County Soil and Water  
Conservation District  
Tillamook Fire District  
Tillamook People's Utility District  
Tillamook Public Schools  
Tillamook, City of  
Wheeler, City of

Umatilla (30)  
Athena, City of  
Athena-Weston School District #29RJ  
Blue Mountain Community College  
Echo School District  
Echo, City of  
Helix School District  
Hermiston, City of  
InterMountain ESD  
Ione School District  
Milton-Freewater Unified School District  
Milton-Freewater, City of  
Nixyaawii Community School  
Pendleton School District #16R  
Pendleton, City of  
Pilot Rock School District #2R  
Pilot Rock, City of  
Port of Umatilla  
Stanfield School District  
Stanfield, City of  
Ukiah School  
Umatilla County  
Umatilla County Fire District #1  
Umatilla County Soil and Water District  
Umatilla County Special Library District  
Umatilla Fire Department  
Umatilla School District #6R  
Umatilla, City of  
Umatilla-Morrow Radio and Data  
District  
Wallowa County Region #18 ESD  
Weston, City of

Union (14)  
Cove School District  
Eastern Oregon University

Elgin School District #23  
Elgin, City of  
Imbler RFPD  
Imbler School District  
Imbler, City of  
La Grande Public Schools  
La Grande, City of  
North Powder School District  
North Powder, City of  
Northeast Oregon Housing Authority  
Tri-County Cooperative Weed  
Management Area  
Union County School District

Wallowa (9)  
Enterprise School District #21  
Enterprise, City of  
Joseph School District #6  
Joseph, City of  
Troy School District #54  
Wallowa County  
Wallowa County Region #18 ESD  
Wallowa School  
Wallowa, City of

Wasco (17)  
Columbia Gorge Community College  
Columbia Gorge ESD  
Dufur Schools  
Dufur, City of  
Maupin, City of  
Mid-Columbia Center for Living  
Mid-Columbia Fire and Rescue  
Mosier Community School  
Mosier Fire District  
North Central Public Health District  
North Wasco County Parks and  
Recreation  
North Wasco County School District  
#21  
Northern Oregon Corrections  
Port of The Dalles  
South Wasco County School District #1  
Wasco County  
Wasco County Soil and Water  
Conservation District

Washington (39)  
Arco Iris Spanish Immersion Charter  
School  
Banks Fire District #13  
Banks School District  
Banks, City of  
Beaverton School District  
Beaverton, City of  
City View Charter School  
Clean Water Services  
Cornelius, City of  
Durham, City of  
Forest Grove Community School  
Forest Grove School District  
Forest Grove, City of  
Gaston Public Schools  
Gaston RFPD  
Gaston, City of  
Hillsboro School District #1J  
Hillsboro, City of  
Hope Chinese Charter School  
King City, City of

Metropolitan Area Communication  
Commission  
MITCH Charter School  
North Plains, City of  
Northwest Regional ESD  
Oregon Dairy Products Commission  
Oregon State Bar  
Oregon State Bar Professional Liability  
Fund  
Sherwood Charter School  
Sherwood School District #88J  
Sherwood, City of  
Tigard, City of  
Tigard-Tualatin School District #23J  
Tualatin Valley Fire and Rescue  
Tualatin Valley Irrigation District  
Tualatin Valley Water District  
Tualatin, City of  
Washington County  
Washington County Consolidated  
Communications Agency  
West Slope Water District

Wheeler (4)  
Fossil School District #21J  
Fossil, City of  
Mitchell School  
Spray School District #1

Yamhill (26)  
Amity Fire District  
Amity School District  
Amity, City of  
Carlton, City of  
Dayton Public Schools  
Dayton, City of  
Dundee, City of  
Eola Hills Charter School  
Lafayette, City of  
McMinnville Schools  
McMinnville Water and Light  
Department  
McMinnville, City of  
New Carlton Fire District  
Newberg School District #29JT  
Newberg, City of  
Sheridan AllPrep Academy  
Sheridan Fire District  
Sheridan School District #48J  
Sheridan, City of  
Willamina School District #30J  
Willamina, City of  
Yamhill Communications Agency  
Yamhill County  
Yamhill Fire Protection District  
Yamhill, City of  
Yamhill-Carlton School District #1

### Key Acronyms

RFPD = Rural Fire Protection District  
ESD = Education Service District

### Participation of employers in defined benefit and other postemployment benefit plans:

Defined Benefit Pension Plan – all 897 employers participate.  
RHIA OPEB Plan – all 897 employers participate.  
RHIPA OPEB Plan – all 108 state agency employers participate.



