INTO THE FUTURE TOGETHER

Oklahoma Public Employees Retirement System

ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the fiscal years ended JUNE 30, 2022 and JUNE 30, 2023

A Component Unit of the State of Oklahoma

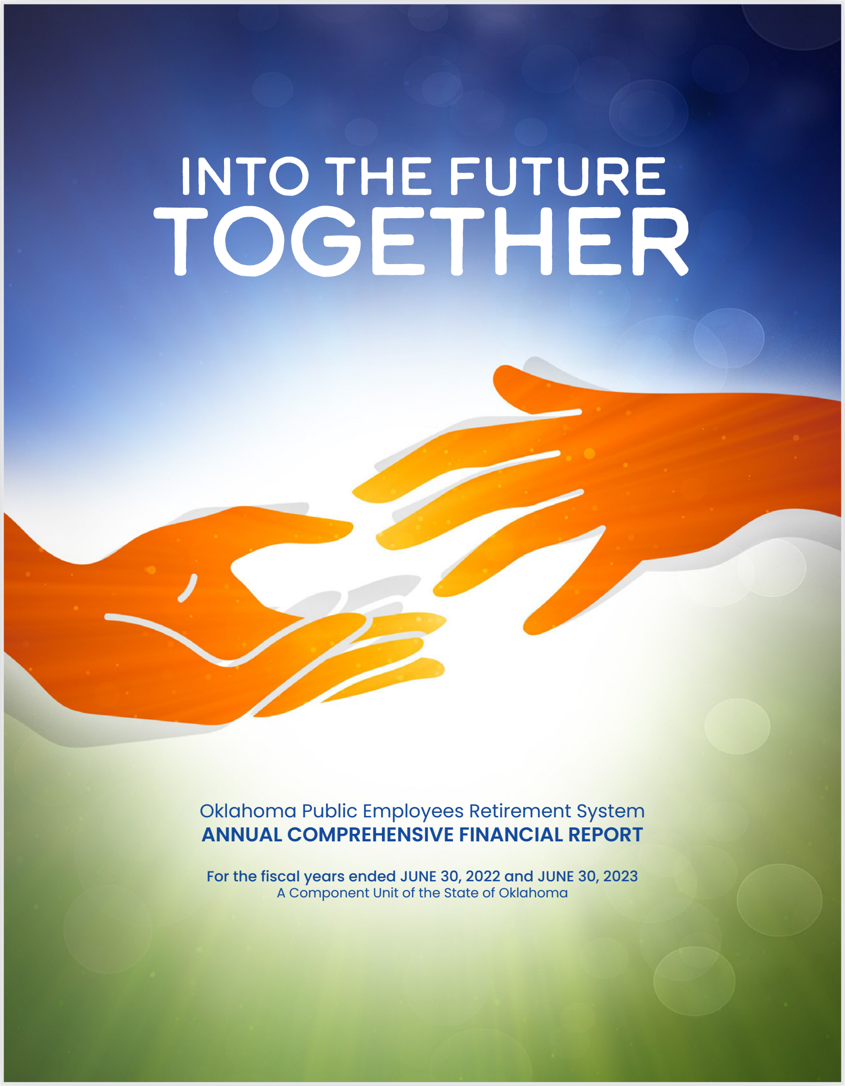
INTO THE FUTURE TOGETHER

At OPERS, we have always endeavored to offer our members the best tools and services to achieve a secure and lasting retirement – these tools are tried and tested and have often existed since our agency's inception. Over the past few years, however, we have eased into digital transformation by reimagining one process or tool at a time. These changes have brought along results ranging from surprising to satisfying. We are now fully committed to this journey by examining all aspects of what we do. We are looking at every process and procedure with new eyes to find where we can improve and become more efficient. We hope the culmination of this project goes beyond just modernization and into unlocking future potential. Though this new era is impossible to fully integrate overnight, we are looking forward to experiencing it together with our members.

Into the Future Together also encapsulates what we strive for daily. As a public retirement system, OPERS forms long-lasting and personal relationships with our members, even before they are truly aware of our presence. We follow them decades after their careers in public service end. We are proud of our agency's roots and traditions. This new push into engaging and adaptable technology is a way of honoring those who came before us. No matter the year, OPERS has always been committed to serving our members' best interests, whether that be through paper forms or accessible online communications.

In the following pages, the ACFR dividers will explore a Then and Now of OPERS. Now is the living record we are creating. Then serves as a historical roadmap of how we've grown and helps us appreciate where we are headed. In some sections, we have even incorporated A Look Ahead, to illustrate our continued promise to our members.

OKLAHOMA



This report was prepared by the staff of the Oklahoma Public Employees Retirement System.

This publication is issued by the Oklahoma Public Employees Retirement System as authorized by its Executive Director. Copies have not been printed but are available through the agency website. An electronic version of this publication has been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries.

2023 Annual Comprehensive Financial Report

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INTRODUCTION

OUR BEGINNINGS

THEN: Established in 1964 by Senate Bill 62 and signed into law by Governor Henry Bellmon, OPERS served roughly 15,000 active members and managed more than $1 million in total assets its first year. By our fifth year we had nearly 1,800 retired members and paid roughly $3 million in benefits.

NOW: Fifty-nine years later, OPERS serves over 72,000 members, pays roughly $700 million in annual benefits, and manages in excess of $11 billion in total assets.

Letter of Transmittal

Oklahoma Public Employees Retirement System
P.O. Box 53007
Oklahoma City, Oklahoma 73152-3077

800.733.9008 toll-free
405.848.5946 fax

November 16, 2023

To the Board of Trustees and Members of the Oklahoma Public Employees Retirement System:

State law requires that, after July 1 and before December 1 of each year, the Oklahoma Public Employees Retirement System (the System) publish an annual report that covers the operation of the System during the past fiscal year, including income, disbursements and the financial condition at the end of the fiscal year. This report is published, in part, to fulfill that requirement for the fiscal year ended June 30, 2023.

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal control that it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Eide Bailly LLP, Certified Public Accountants, has issued an unmodified opinion on the Oklahoma Public Employees Retirement Plan's statement of fiduciary net position as of June 30, 2023, and the related statement of changes in fiduciary net position for the year then ended. The independent auditor's report is located at the front of the Financial Section of this report.

Management's discussion and analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

Profile of the System

The System is a multiple-employer, cost-sharing public employee retirement plan, which is a defined benefit pension plan. It covers substantially all employees of the State of Oklahoma (the State) except those covered by seven other plans sponsored by the State and also covers employees of participating counties and local agencies. Nearly all new state employees first employed by a System participating employer on or after November 1, 2015, will participate in the State's Pathfinder defined contribution plan. Therefore, the System is closed to nearly all new State employees but remains open to new employees of participating counties and local agencies. The employee and employer contribution rates for each member category are established by the Oklahoma Legislature after recommendation by the System's Board of Trustees based on an actuarial calculation which is performed to determine the adequacy of such contribution rates.

Members qualify for full retirement benefits at their specified normal retirement age or, depending upon when they became members, when the sum of the member's age and years of credited service equals 80 or 90. Generally, benefits for

Letter of Transmittal (continued)

state, county, and local agency employees are determined at 2% of the average salary, as defined, multiplied by the number of years of credited service. Members may elect to pay an additional contribution rate to receive benefits using a 2.5% factor for each full year the additional contributions are made. Separate benefit calculations are in effect for elected officials and hazardous duty members.

The System also administers the Health Insurance Subsidy Plan (HISP), a cost-sharing multiple-employer defined benefit other post-employment benefit (OPEB) plan that provides OPEB covering the same categories of employees covered by the pension plan. HISP provides a health insurance premium subsidy for retirees of the System who elect to maintain health insurance with the Oklahoma Employees Group Insurance Division (EGID) or other qualified insurance plan provided by the employer. This subsidy continues until the retiree terminates health insurance coverage with EGID or other qualified plan, or until death. The subsidy is only for the retiree, not joint annuitants or beneficiaries.

The Board of Trustees of the System consists of fourteen appointed members, some by position and some by appointment. Those serving through position are a member of the Corporation Commission or the Commission's designee selected by the Commission, the Director of the Office of Management and Enterprise Services or the Director's designee, the State Insurance Commissioner or the Commissioner's designee, the Director of Human Capital Management of the Office of Management and Enterprise Services, a member of the Tax Commission selected by the Tax Commission, and the State Treasurer or the Treasurer's designee. Of the remaining members, three are appointed by the Governor, one is appointed by the Supreme Court, two are appointed by the Speaker of the House of Representatives and two are appointed by the President Pro Tempore of the Senate. Qualifications for certain of these appointees include a balance of individuals having experience in investment management, pension management, public fund management, the banking profession or a licensed attorney or a licensed accountant.

Each year, OPERS, along with other state agencies, is required to file a budget work program with the Office of Management and Enterprise Services. This work program, as approved by the Board of Trustees, must include a description of all funds available for expenditure and show spending by major program category. OPERS receives no state appropriations and is funded through employee and employer contributions and investment earnings.

Additionally, in each even-numbered year, OPERS, along with other state agencies, must file a strategic plan covering five fiscal years beginning with the next odd-numbered fiscal year. The strategic plan includes a mission statement, the core values and behaviors inherent to operations, and a summary of goals and objectives to be achieved through specific projects outlined for the five-year period. The mission of the OPERS Board and staff is to provide and promote comprehensive, accountable and financially sound retirement services to Oklahoma's public servants in a professional, efficient and courteous manner. The core values and behaviors inherent to the agency's operations are honesty and integrity; excellence in customer experience; quality in service delivery; collaboration and community; and strategic perspective. The summary of goals and objectives outlined in the strategic plan are:

- Create an excellent customer experience for members
- Improve the stability, reliability and security of agency resources and data
- Enhance digital resources to streamline service delivery
- Empower employees and members through knowledge and resources
- Foster a culture of employee development and success

Investments

The standard for OPERS in making investments is to exercise the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of like character, unless under the circumstances it is clearly prudent not to do so. OPERS' funds are invested solely in the best interest of the members and beneficiaries with the goal of keeping administrative expenses as low as practical. The Board has established an investment policy and guidelines that identify asset allocation as

Letter of Transmittal (continued)

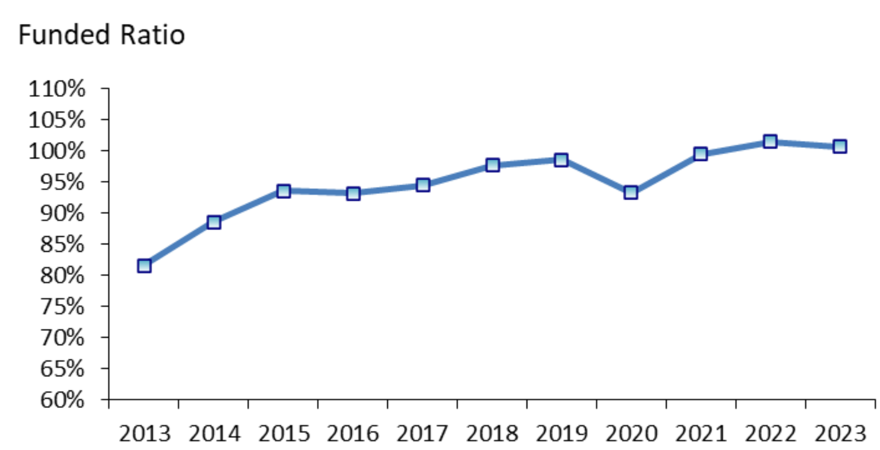
the key determinant of return and risk. Diversification, both by and within asset classes, is the primary risk control element in the portfolio. Passive funds are considered to be suitable investment strategies, especially in highly efficient markets.

The Board engages outside investment managers to manage the various asset classes where OPERS has exposure. At fiscal year end, the investment portfolio of OPERS was actively managed by three fixed income managers, six domestic equity managers and two international equity managers. OPERS' investment portfolio also consisted of passively managed index funds, including one fixed income index fund, two domestic equity index funds and two international equity index funds.

Included in the Investment Section of this report are a summary of the Investment Portfolio by Type and Manager and a comparison of the above amounts to the target allocations, as shown in the Asset Comparison chart. For fiscal year 2023 investments provided a return of 10.9 percent. The annualized rate of return for OPERS as of June 30, 2023 was 6.7 percent over the last three years and 6.2 percent over the last five years.

Funding

A pension fund is well funded when it has enough money in reserve to meet all expected future obligations to participants. It must also have a revenue source sufficient to keep up with future obligations. The funding objective for OPERS is to meet long-term benefit promises through contributions that remain approximately level as a percent of member payroll. The greater the level of funding, the larger the ratio of assets accumulated to the actuarial accrued liability and the greater the level of investment potential. The advantage of a well-funded plan is that the participants can look at assets that are committed to the payment of benefits. The actuarial accrued liability and actuarial value of assets of OPERS as of July 1, 2023, amounted to $11.5 billion and $11.6 billion respectively.



The OPERS funded status was at 100.7 percent on July 1, 2023. In 2011, the funded ratio significantly increased to 80.7 percent due to the removal of the cost-of-living-adjustment (COLA) assumption, and further increased to 93.6 percent at July 1, 2015. The Legislature addressed the need for increased funding by increasing the employer contribution rate by 1.5 percent effective July 1, 2005. The next year the rate was increased 1.0 percent for state agencies with the continuation of the 1.0 percent increase each year until it was 16.5 percent in fiscal year 2012. The combined employee and employer contribution rate increased 1.0 percent annually until July 1, 2011, when it reached 20.0 percent where it has remained. The Legislature has provided a statutory requirement that retirement bills be analyzed for actuarial fiscal impact and contain adequate funding sources sufficient to pay the cost of the change. A detailed discussion of funding is provided in the Actuarial Section of this report.

Letter of Transmittal (continued)

Awards and Acknowledgements

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Oklahoma Public Employees Retirement System for its annual comprehensive financial report for the fiscal year ended June 30, 2022. This was the twenty-sixth year OPERS has received this prestigious award. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized annual comprehensive financial report that satisfies both generally accepted accounting principles and applicable legal requirements.

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

In addition, the Oklahoma Public Employees Retirement System was awarded the Public Pension Standards Award by the Public Pension Coordinating Council, a confederation of the National Association of State Retirement Administrators, the National Conference on Public Employee Retirement Systems, and the National Council on Teacher Retirement. This award is in recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards.

The preparation of this report would not have been possible without the efficient and dedicated service of the entire staff of OPERS. We wish to express our appreciation to all staff members who assisted and contributed to the preparation of this report. Credit also must be given to the Board of Trustees for their unfailing support for maintaining the highest standards of professionalism in the financial management of the Oklahoma Public Employees Retirement System.

Respectfully submitted,

Joseph A. Fox
Executive Director

Brian Wolf
Chief Financial Officer and Director of Finance

Chairperson’s Letter

Oklahoma Public Employees Retirement System
P.O. Box 53007
Oklahoma City, Oklahoma 73152-3007

800.733.7008 toll-free
405.848.5946 fax

November 16, 2023

Dear OPERS Members:

On behalf of the Board of Trustees of the Oklahoma Public Employees Retirement System (OPERS), I am pleased to present the Annual Comprehensive Financial Report for the fiscal year ending June 30, 2023.

This report is designed to provide a detailed look at the financial, investment and actuarial aspects of OPERS, which continues to be a strong retirement system.

You are encouraged to carefully review this report, as it contains a wealth of information about your retirement system. If you have questions or comments, please feel free to contact us. We can be reached at P.O. Box 53007, Oklahoma City, Oklahoma 73152-3007. Our telephone number is 405-858-6737 (or toll-free 1-800-733-9008).

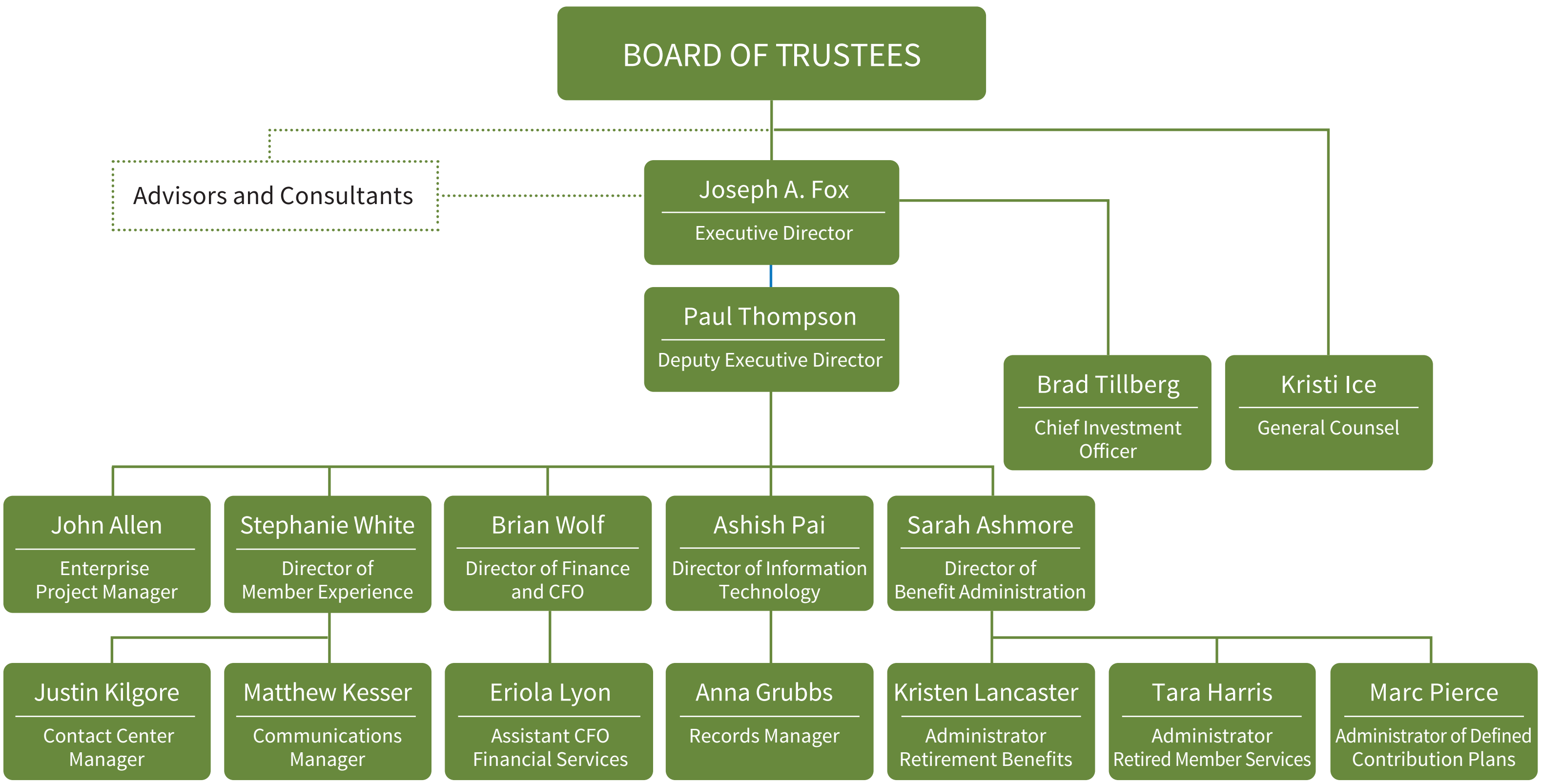
I also want to thank the OPERS staff for their diligent work in preparing this report and their commitment to continually improve the administrative operations of OPERS.

Sincerely,

Brandy Manek
Chairperson

BOARD OF TRUSTEES

ORGANIZATIONAL STRUCTURE



ADVISORS AND CONSULTANTS

Master Custodian
The Northern Trust Company
Chicago, Illinois

Investment Consultant
Verus Advisory, Inc.
Seattle, Washington

Independent Auditors
Eide Bailly LLP
Oklahoma City, Oklahoma

Actuarial Consultant
Cavanaugh Macdonald Consulting, LLC
Kennesaw, Georgia

Internal Auditors
Finley & Cook PLLC
Shawnee, Oklahoma

*The Schedules of Investment Expenses and Professional/Consultant Fees (pages 58 and 60, respectively) in the Financial Section and the Schedule of Stock Brokerage Commissions Paid (page 79) in the Investment Section provide more information regarding advisors and consultants.

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Oklahoma Public Employees Retirement System

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2022

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2023

Presented to

Oklahoma Public Employees Retirement System

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

Presented by the Public Pension Coordinating Council, a confederation of

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

Alan H. Winkle
Program Administrator

FINANCIAL

COMMUNICATION

THEN: In OPERS' beginnings, receiving retirement specific information required a member to complete a paper form and wait for a letter in the mail. Rural members were especially underserved by this, as forms could only be mailed in, or hand delivered. To learn about their plan, members would need to thumb through a handbook that at one time grew to over 70 pages.

NOW: Many of our forms can now be completed online. Often we can respond and provide results by email, which provides quicker service to our members. Accessing basic plan information and updates is now easier through our flyers, brochures and newsletters or by searching our website.

A LOOK AHEAD: We will soon launch an online Member Portal, where members will have access to important documents in one easy to use place and begin communicating in new digital ways.

CPAs & BUSINESS ADVISORS

Independent Auditor's Report

To the Board of Trustees
Oklahoma Public Employees Retirement System
Oklahoma City, Oklahoma

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the pension and health insurance subsidy plan (HISP) funds of the Oklahoma Public Employees Retirement Plan (the System), a component unit of the State of Oklahoma, as of and for the years ended June 30, 2023 and 2022, 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 referred to above present fairly, in all material respects, the respective financial position of Oklahoma Public Employees Retirement System as of June 30, 2023 and 2022, and the respective changes in financial positions for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). 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 Oklahoma Public Employees Retirement 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.

Responsibilities of Management for the Financial Statements

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.

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621 N. Robinson Ave., Ste. 200 | Oklahoma City, OK 73102-6232 | T 405.594.2000 | F 405.594.2053 | EOE

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 Oklahoma Public Employees Retirement System's ability to continue as a going concern for one year after the date that the financial statements are available to be issued.

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 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, 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 Oklahoma Public Employees Retirement 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 Oklahoma Public Employees Retirement 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 and the required supplementary information, as referenced within the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The other supplementary information is presented for purposes of additional analysis and is not a required part of the financial statements.

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

Other Information

Management is responsible for the other information included in the annual 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.

Eide Bailly LLP

Oklahoma City, Oklahoma
October 9, 2023

Management's Discussion and Analysis
(Unaudited)

As management of the Oklahoma Public Employees Retirement System (the System), we offer readers of the System's financial statements this narrative overview and analysis of the financial activities of the System for the fiscal years ended June 30, 2023, 2022, and 2021.

Financial Highlights

- The net position restricted for pension and health insurance subsidy plan (HISP) totaled slightly under $11.2 billion at June 30, 2023 comparable to the position at June 30, 2022 of $10.4 billion and $12.5 billion at June 30, 2021. The increase of $0.8 billion from the prior year was due to an increase in investment income and flows of funds. The net position is available for payment of monthly retirement benefits and other qualified distributions to the System's participants. US Equity and International Equity saw a significant gain in fiscal year (FY) 2023, resulting in an increase in net investment income which led to a gain in net position restricted for pension/HISP benefits from June 30, 2022 to June 30, 2023 contrary to the prior year where there was a significant loss of a negative 14.5% rate of return from June 30, 2021 to June 30, 2022.
- At June 30, 2023, 2022, and 2021, the total number of members participating in the System decreased 0.9% for 2023 and decreased 1.6% in 2022 and 2021. Membership was 72,331 at June 30, 2023, 73,015 at June 30, 2022, and 74,195 at June 30, 2021. The number of retirees increased by 0.7% as of June 30, 2023, increased by 0.8% as of June 30, 2022, and increased by 0.5% as of June 30, 2021. The total number of retirees was 36,899 at June 30, 2023, 36,649 at June 30, 2022, and 36,351 at June 30, 2021.

Overview of the Financial Statements

The System is a multiple-employer, cost-sharing public employee retirement plan, which is a defined benefit pension plan. The System covers substantially all employees of the state of Oklahoma (the State) except those covered by seven other plans sponsored by the State. The System also covers employees of participating counties and local agencies.

Nearly all new state employees first employed by a System participating employer on or after November 1, 2015 are participating in the State's new defined contribution plan. Therefore, the System is closed to nearly all new State employees but remains open to new employees of participating counties and local agencies.

For most of the System's members, benefits are determined at 2% of the average highest thirty-six months' annual covered compensation multiplied by the number of years of credited service. Members qualify for full retirement benefits at their specified normal retirement age or as adjusted by the provisions of the Oklahoma Statutes as further explained in the notes to the basic financial statements (refer to the note 3(b)).

The System also includes a multiple-employer, cost-sharing public employee other post-employment benefit plan, which is a defined benefit plan. This plan is called the Health Insurance Subsidy Plan (HISP), and it provides a health insurance premium subsidy for retirees of the System who elect to maintain health insurance with the Oklahoma Employees Group Insurance Division (EGID) or other qualified insurance plan provided by the employer. This subsidy continues until the retiree terminates health insurance coverage with EGID or other qualified plan, or until death. The subsidy is only for the retiree, not joint annuitants or beneficiaries.

The System's financial statements are comprised of the Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position for both the pension and HISP, and Notes to Financial Statements. Also included are certain required supplementary information and supplementary information for both the pension and HISP.

Management's Discussion and Analysis (continued)
(Unaudited)

The System is administered by the Oklahoma Public Employees Retirement System, a component unit of the State, which together with other similar funds comprise the fiduciary-pension and HISP trust funds of the State.

The *Statements of Fiduciary Net Position* present information on the System's assets, liabilities and the resulting *net position restricted for pension and net position restricted for HISP.* These statements reflect the System's investments, at fair value, along with cash and cash equivalents, receivables, and other assets and liabilities.

The *Statements of Changes in Fiduciary Net Position* presents information showing how the System's net position restricted for pension and HISP changed during the years ended June 30, 2023 and 2022. It reflects contributions by members and participating employers along with deductions for retirement benefits, refunds and withdrawals, and administrative expenses. Investment income during the period is also presented showing income from investing and securities lending activities.

The *Notes to Financial Statements* provide additional information that is essential to a full understanding of the data provided in the financial statements.

The *Required Supplementary Information* presents a schedule of changes in the net pension (asset) liability, schedule of pension employer contributions, schedules of money-weighted rate of return on pension plan investments, schedule of changes in the net HISP (asset) liability, schedule of HISP employer contributions, and schedules of money-weighted rate of return on HISP investments. Schedules of certain expenses and fees paid are presented as *supplementary information.*

Management's Discussion and Analysis (continued)
(Unaudited)

Financial Analysis

The following are the condensed Schedules of Fiduciary Net Position and Changes in Fiduciary Net Position for the Oklahoma Public Employees Retirement System for the fiscal years ended June 30, 2023, 2022 and 2021.

Condensed Schedules of Fiduciary Net Position
($ millions)

	2023			2022			2021		
	Pension	HISP	Combined	Pension	HISP	Combined	Pension	HISP	Combined
Assets:									
Cash and cash equivalents	$ 112.2	$ 8.6	$ 120.8	$ 172.4	$ 8.9	$ 181.3	$ 511.7	$ 11.6	$ 523.3
Receivables	334.3	13.3	347.6	317.2	12.7	329.9	543.5	20.8	564.3
Investments	10,810.1	436.2	11,246.3	10,092.0	407.8	10,499.8	12,064.2	466.3	12,530.5
Securities lending collateral	334.6	13.5	348.1	463.1	18.7	481.8	580.4	22.4	602.8
Other assets	0.7	-	0.7	0.4	-	0.4	0.8	0.1	0.9
Total assets	11,591.9	471.6	12,063.5	11,045.1	448.1	11,493.2	13,700.6	521.2	14,221.8
Liabilities:									
Other liabilities	541.4	21.9	563.3	594.5	24.0	618.5	1,052.5	40.7	1,093.2
Securities lending collateral	334.6	13.5	348.1	463.1	18.7	481.8	580.4	22.4	602.8
Total liabilities	876.0	35.4	911.4	1,057.6	42.7	1,100.3	1,632.9	63.1	1,696.0
Ending fiduciary net position	$ 10,715.9	$ 436.2	$ 11,152.1	$ 9,987.5	$ 405.4	$ 10,392.9	$ 12,067.7	$ 458.1	$ 12,525.8

Condensed Schedules of Changes in Fiduciary Net Position
($ millions)

	2023			2022			2021		
	Pension	HISP	Combined	Pension	HISP	Combined	Pension	HISP	Combined
Member contributions	$ 68.7	$ -	$ 68.7	$ 66.4	$ -	$ 66.4	$ 66.2	$ -	$ 66.2
State and local agency contributions	296.2	16.8	313.0	283.2	16.6	299.8	275.3	17.7	293.0
Net investment income (loss)	1,071.7	31.0	1,102.7	(1,736.6)	(51.9)	(1,788.5)	2,681.3	83.0	2,764.3
Total additions	1,436.6	47.8	1,484.4	(1,387.0)	(35.3)	(1,422.3)	3,022.8	100.7	3,123.5
Retirement, death and survivor benefits	688.6	16.8	705.4	675.6	17.2	692.8	661.6	17.7	679.3
Refunds and withdrawals	13.1	-	13.1	11.9	-	11.9	10.7	-	10.7
Administrative expenses	6.5	0.2	6.7	5.7	0.2	5.9	5.3	0.2	5.5
Total deductions	708.2	17.0	725.2	693.2	17.4	710.6	677.6	17.9	695.5
Net increase (decrease) in fiduciary net position	728.4	30.8	759.2	(2,080.2)	(52.7)	(2,132.9)	2,345.2	82.8	2,428.0
Beginning of year	9,987.5	405.4	10,392.9	12,067.7	458.1	12,525.8	9,722.5	375.3	10,097.8
End of year	$ 10,715.9	$ 436.2	$ 11,152.1	$ 9,987.5	$ 405.4	$ 10,392.9	$ 12,067.7	$ 458.1	$ 12,525.8

For the year ended June 30, 2023, fiduciary net position increased by $759.2 million, or 7.3%, from June 30, 2022. Total assets increased $570.3 million, or 5.0%, due to a 7.1% increase in investments change in fair value and 5.0% increase in total assets. The System achieved a rate of return of 10.9% which is considerably higher than the prior year of -14.5%. Total liabilities decreased $188.9 million, or 17.2%, due to an 8.9% decrease in pending purchases of securities.

Fiscal year 2023 resulted in a $2,906.7 million increase in total additions and a $14.6 million increase in total deductions. Compared to the prior year, the increase in additions was primarily due to an increase of $2,891.2 million in net investment income. Deductions increased 2.1% due to a $12.6 million increase in retirement, death, and survivor benefits.

For the year ended June 30, 2022, fiduciary net position decreased by $2,132.9 million, or 17.0%, from June 30, 2021. Total assets decreased $2,728.6 million, or 19.2%, due to a 16.2% decrease in investments change in fair value and 20.1% decrease in Securities lending collateral. The System achieved a rate of return of -14.5% which is considerably lower than the prior year of 28.0%. Total liabilities decreased $595.7 million, or 35.1%, due to a 43.4% decrease in pending purchases of securities.

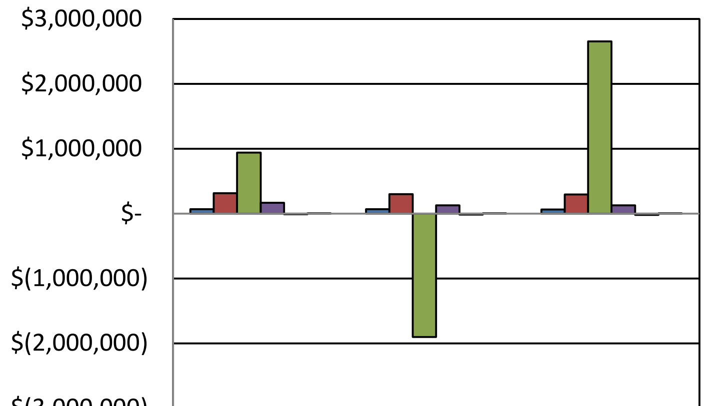
Fiscal year 2022 resulted in a $4,545.8 million decrease in total additions and a $15.1 million increase in total deductions. Compared to the prior year, the decrease in additions was primarily due to a decrease of $4,552.8 million in net investment income. Deductions increased 2.2% due to a $13.5 million increase in retirement, death, and survivor benefits.

Management's Discussion and Analysis (continued)
(Unaudited)

Additions to Fiduciary Net Position

For the year ended June 30, 2023, total additions to fiduciary net position increased $2,906.7 million from the prior year. The net increase in net investment income of $2,891.2 million was the result of a much stronger market in 2023 than in the prior year. Interest income increased $40.0 million, or 60.5%, and dividend income increased $2.0 million, or 3.3%. Securities lending net income increased $0.2 million or 17.0%. Contributions were $15.5 million, or 4.2% higher than the prior year due to an increase in contributions.

Additions to Fiduciary Net Position
Comparative Data for Fiscal Years Ended June 30, 2023, 2022 and 2021
($ thousands)



	2023	2022	2021
Member contributions	$68,660	$66,392	$66,204
State and local agency contributions	312,993	299,743	293,019
Net appreciation (depreciation)	943,118	(1,902,266)	2,655,094
Interest, dividends, and other investment income	169,528	126,915	126,632
Investment expenses	(11,429)	(14,471)	(18,789)
Securities lending income	1,548	1,323	1,414

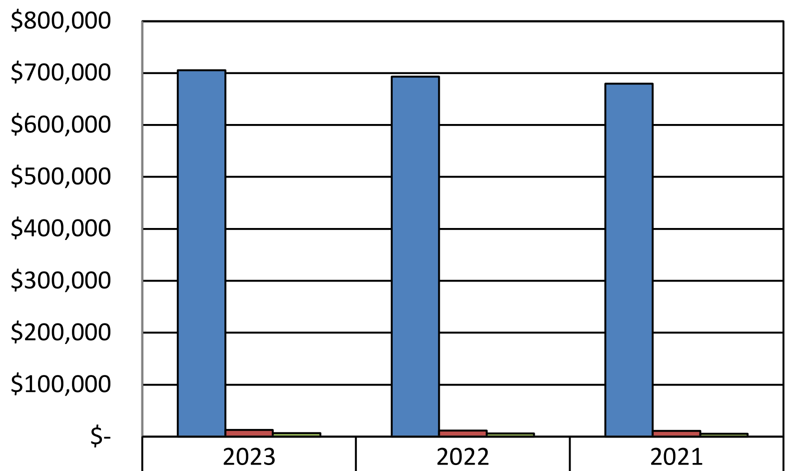
For the year ended June 30, 2022, total additions to fiduciary net position decreased $4,545.8 million from the prior year. The net decrease in net investment income of $4,552.8 million was the result of a much weaker market in 2022 than in the prior year. Interest income increased $3.3 million, or 5.2%, and dividend income decreased $2.7 million, or -4.3%. Securities lending net income decreased $0.09 million or -6.4%. Contributions were $7.0 million, or 1.9% higher than the prior year due to an increase in contributions.

Deductions to Fiduciary Net Position

For the year ended June 30, 2023, total deductions on the following page increased $14.6 million, or 2.1%, from the prior year. Retirement, death, and survivor benefits increased $12.6 million, or 1.8%, due to a 0.7% increase in the number of retirees at year end and a 1.3% increase in the average benefit. Refunds and withdrawals increased $1.3 million, or 10.5%, from prior year followed by a 13.1% increase in administrative costs.

Management's Discussion and Analysis (continued)
(Unaudited)

Deductions to Fiduciary Net Position
Comparative Data for Fiscal Years Ended June 30, 2023, 2022 and 2021
($ thousands)



	2023	2022	2021
Retirement, death and survivor benefits	$705,401	$692,813	$679,281
Refunds and withdrawals	13,152	11,906	10,733
Administrative expenses	6,666	5,893	5,475

For the year ended June 30, 2022, total deductions increased $15.1 million, or 2.2%, from the prior year. Retirement, death, and survivor benefits increased $13.5 million, or 2.0%, due to a 0.8% increase in the number of retirees at year end and a 1.4% increase in the average benefit. Refunds and withdrawals increased $1.2 million, or 10.9%, from prior year followed by a 7.6% increase in administrative costs.

Investments

The investment portfolio is reported in the chart below by the asset class of the investment managers' portfolios which includes the cash and cash equivalents in those portfolios.

A summary of the System's cash, cash equivalents, and investments for fiscal years ended June 30, 2023, 2022 and 2021 is as follows:

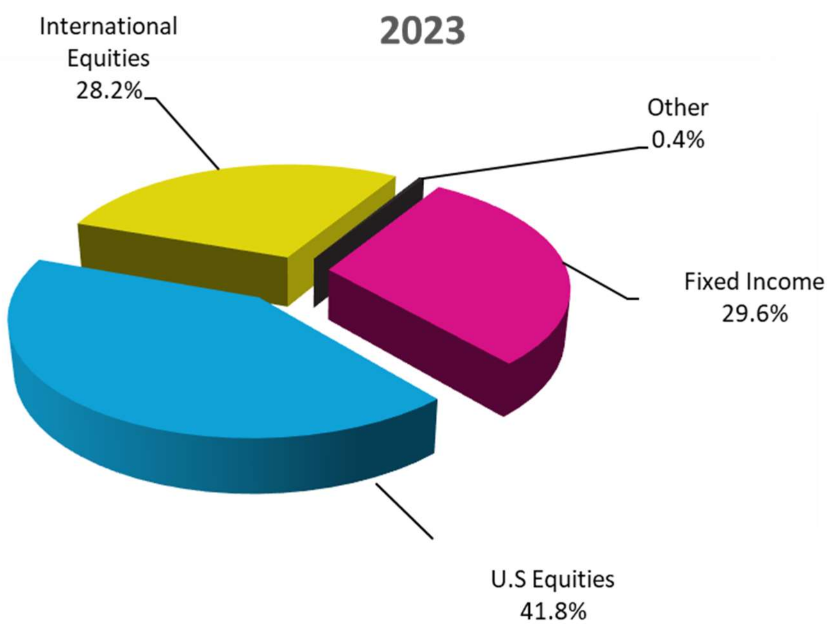
Cash, Cash Equivalents, and Investment Portfolio
($ millions)

	June 30,		
	2023	**2022**	**2021**
Fixed income	$ 3,532.5	$ 3,630.9	$ 4,280.3
U.S. equities	4,651.4	4,184.9	5,167.6
International equities	3,128.6	2,816.0	3,559.6
Other	37.6	35.0	33.5
Total managed investments	11,350.1	10,666.8	13,041.0
Cash equivalents on deposit with State	7.2	5.7	3.5
Real estate	9.7	8.7	9.3
Securities lending collateral	348.1	481.8	602.8
Total cash, cash equivalents, and investments	$ 11,715.1	$11,163.0	$ 13,656.6

Management's Discussion and Analysis (continued)
(Unaudited)

The 2023 increase in the System's managed investments is reflective of the increase in domestic and international income markets for the year. The System's overall return for the year ended June 30, 2023 was 10.9%. U.S. equities jumped this year to a return of 19.0%, followed also by a strong international equity with a return of 13.5%. Fixed income lagged this year with a negative return of -1.0%. An amount of $345 million from the portfolio was used to supplement the cash requirements of monthly retiree benefit payments. The change in securities lending collateral is dependent on the securities loaned by the System's master custodian at year end.

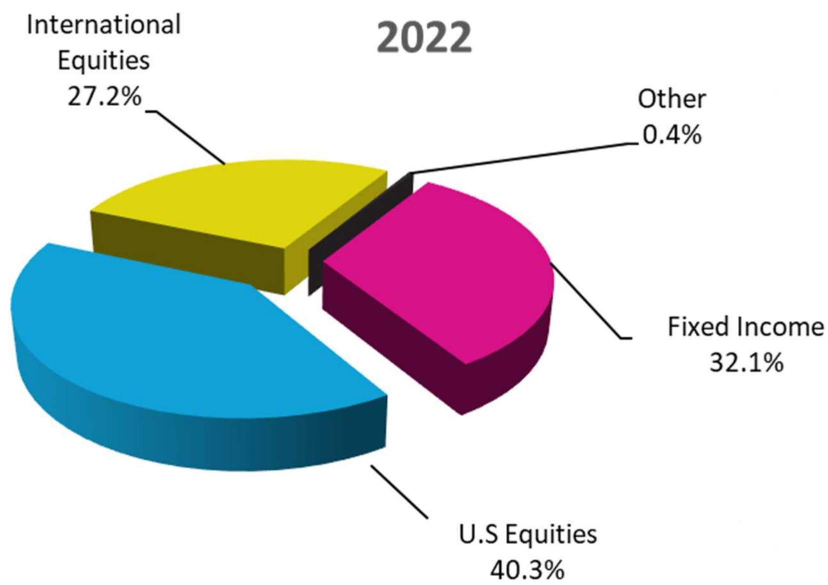
As of June 30, 2023, the distribution of the System's investments including accrued income and pending trades was as follows:

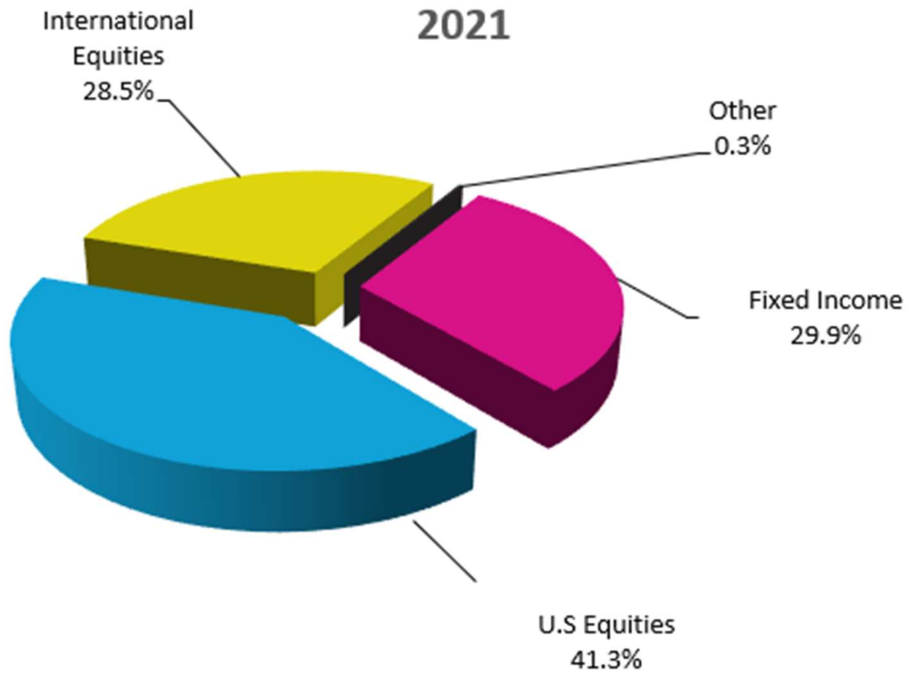


The 2022 decrease in the System's managed investments is reflective of the decrease in domestic and international income markets for the year. The System's overall return for the year ended June 30, 2022 was - 14.5%. U.S. equities plunged this year with a return of -13.1%, followed by a weak international equity with a return of -20.8%. Fixed income showed a negative return of -11.0%. An amount of $344 million from the portfolio was used to supplement the cash requirements of monthly retiree benefit payments. The change in securities lending collateral is dependent on the securities loaned by the System's master custodian at year end.

Management's Discussion and Analysis (continued)
(Unaudited)

As of June 30, 2022 and 2021, the distribution of the System's investments including accrued income and pending trades was as follows:





Management's Discussion and Analysis (continued)
(Unaudited)

Economic Factors

Ratio of Fiduciary Net Position to Total Pension Liability and to Total HISP

Liability The ratio of fiduciary net position to the total pension liability was as follows:

	June 30, 2023	2022	2021
Total pension liability	$ 11,173,394,259	$ 10,828,046,484	$ 10,725,571,917
Plan fiduciary net position	$ 10,715,873,451	$ 9,987,481,670	$ 12,067,732,648
Ratio of fiduciary net position to total pension liability	95.91%	92.24%	112.51%

The ratio of fiduciary net position to the total HISP liability was as follows:

	June 30, 2023	2022	2021
Total HISP liability	$ 308,562,138	$ 311,838,597	$ 320,668,429
Plan fiduciary net position	$ 436,231,576	$ 405,426,213	$ 458,150,586
Ratio of fiduciary net position to total HISP liability	141.38%	130.01%	142.87%

The actuarial assumptions used in the July 1, 2023, valuation are based on the results of the most recent actuarial experience study, which covered the three-year period ending June 30, 2022.

Other than changes in the fair value of System assets as may be impacted by the equity and bond markets, no other matters are known by management to have a significant impact on the operations or financial position of the System.

Requests for Information

This financial report is designed to provide a general overview of the System's finances for all those with an interest. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Financial Reporting Division, OPERS, P.O. Box 53007, Oklahoma City, Oklahoma 73152-3007.

Statements of Fiduciary Net Position

As of June 30, 2023

	Pension Plan	Health Insurance Subsidy Plan	Combined
Assets			
Cash equivalents	$ 112,190,039	$ 8,572,374	$ 120,762,413
Receivables:			
Member contributions	4,583,348	-	4,583,348
State and local agency contributions	15,654,542	631,661	16,286,203
Due from brokers for securities sold	288,373,814	11,635,511	300,009,325
Accrued interest and dividends	25,692,492	1,036,679	26,729,171
Total receivables	334,304,196	13,303,851	347,608,047
Investments, at fair value:			
Short-term investments	2,332,830	94,149	2,426,979
Government obligations	2,447,057,052	98,735,431	2,545,792,483
Corporate bonds	916,446,665	36,977,393	953,424,058
Domestic equities	4,403,041,174	177,656,449	4,580,697,623
International equities	3,031,968,538	122,335,810	3,154,304,348
Real estate	9,275,715	374,285	9,650,000
Securities lending collateral	334,618,240	13,501,367	348,119,607
Total investments	11,144,740,214	449,674,884	11,594,415,098
Other assets	680,228	27,490	707,718
Total assets	11,591,914,677	471,578,599	12,063,493,276
Liabilities			
Due to brokers and investment managers	541,422,986	21,845,656	563,268,642
Securities lending collateral	334,618,240	13,501,367	348,119,607
Total liabilities	876,041,226	35,347,023	911,388,249
Net position restricted for pension/HISP benefits	$ 10,715,873,451	$ 436,231,576	$ 11,152,105,027

See accompanying notes to financial statements.

Statements of Fiduciary Net Position

As of June 30, 2022

	Pension Plan	Health Insurance Subsidy Plan	Combined
Assets			
Cash equivalents	$ 172,350,424	$ 8,941,330	$ 181,291,754
Receivables:			
Member contributions	4,091,427	-	4,091,427
State and local agency contributions	13,954,455	563,947	14,518,402
Due from brokers for securities sold	277,872,313	11,229,426	289,101,739
Accrued interest and dividends	21,307,111	861,082	22,168,193
Total receivables	317,225,306	12,654,455	329,879,761
Investments, at fair value:			
Short-term investments	36,570,320	1,477,902	38,048,222
Government obligations	2,311,572,294	93,415,546	2,404,987,840
Corporate bonds	1,043,047,379	42,151,769	1,085,199,148
Domestic equities	3,965,711,656	160,262,609	4,125,974,265
International equities	2,726,763,393	110,194,297	2,836,957,690
Real estate	8,313,997	336,003	8,650,000
Securities lending collateral	463,122,710	18,715,752	481,838,462
Total investments	10,555,101,749	426,553,878	10,981,655,627
Other assets	402,812	16,314	419,126
Total assets	11,045,080,291	448,165,977	11,493,246,268
Liabilities			
Due to brokers and investment managers	594,475,911	24,024,012	618,499,923
Securities lending collateral	463,122,710	18,715,752	481,838,462
Total liabilities	1,057,598,621	42,739,764	1,100,338,385
Net position restricted for pension/HISP benefits	$ 9,987,481,670	$ 405,426,213	$ 10,392,907,883

See accompanying notes to financial statements.

Statements of Changes in Fiduciary Net Position

For The Fiscal Year Ended In June 30, 2023

	Pension Plan	Health Insurance Subsidy Plan	Combined
Additions			
Contributions:			
Members	$ 68,660,051	$ -	$ 68,660,051
State and local agencies	296,240,730	16,752,000	312,992,730
Total contributions	364,900,781	16,752,000	381,652,781
Investment income:			
From investing activities:			
Net appreciation in fair value of investments	916,717,170	26,400,681	943,117,851
Interest	103,042,090	3,185,701	106,227,791
Dividends	60,914,690	1,754,292	62,668,982
Real estate	613,073	17,656	630,729
Total investment income	1,081,287,023	31,358,330	1,112,645,353
Less – Investment expenses	(11,109,313)	(319,939)	(11,429,252)
Income from investing activities	1,070,177,710	31,038,391	1,101,216,101
From securities lending activities:			
Securities lending income	19,093,021	549,863	19,642,884
Securities lending expenses:			
Borrower rebates	(17,323,571)	(498,904)	(17,822,475)
Management fees	(265,227)	(7,638)	(272,865)
Income from securities lending activities	1,504,223	43,321	1,547,544
Net investment income	1,071,681,933	31,081,712	1,102,763,645
Total additions	1,436,582,714	47,833,712	1,484,416,426
Deductions			
Retirement, death and survivor benefits	688,559,350	16,841,749	705,401,099
Refunds and withdrawals	13,152,243	-	13,152,243
Administrative expenses	6,479,340	186,600	6,665,940
Total deductions	708,190,933	17,028,349	725,219,282
Net increase in net position	728,391,781	30,805,363	759,197,144
Net position restricted for pension/HISP benefits			
Beginning of year	9,987,481,670	405,426,213	10,392,907,883
End of year	$ 10,715,873,451	$ 436,231,576	$ 11,152,105,027

See accompanying notes to financial statements.

Statements of Changes in Fiduciary Net Position

For The Fiscal Year Ended In June 30, 2022

	Pension Plan	Health Insurance Subsidy Plan	Combined
Additions			
Contributions:			
Members	$ 66,392,310	$ -	$ 66,392,310
State and local agencies	283,159,221	16,584,000	299,743,221
Total contributions	349,551,531	16,584,000	366,135,531
Investment income:			
From investing activities:			
Net depreciation in fair value of investments	(1,847,044,336)	(55,222,088)	(1,902,266,424)
Interest	64,239,865	1,958,446	66,198,311
Dividends	58,885,137	1,760,521	60,645,658
Real estate	69,055	2,065	71,120
Total investment income (loss)	(1,723,850,279)	(51,501,056)	(1,775,351,335)
Less – Investment expenses	(14,051,086)	(420,093)	(14,471,179)
Loss from investing activities	(1,737,901,365)	(51,921,149)	(1,789,822,514)
From securities lending activities:			
Securities lending income	2,071,220	61,924	2,133,144
Securities lending expenses:			
Borrower rebates	(560,889)	(16,769)	(577,658)
Management fees	(225,473)	(6,741)	(232,214)
Income from securities lending activities	1,284,858	38,414	1,323,272
Net investment income (loss)	(1,736,616,507)	(51,882,735)	(1,788,499,242)
Total additions	(1,387,064,976)	(35,298,735)	(1,422,363,711)
Deductions			
Retirement, death and survivor benefits	675,558,744	17,254,579	692,813,323
Refunds and withdrawals	11,905,764	-	11,905,764
Administrative expenses	5,721,494	171,059	5,892,553
Total deductions	693,186,002	17,425,638	710,611,640
Net decrease in net position	(2,080,250,978)	(52,724,373)	(2,132,975,351)
Net position restricted for pension/HISP benefits			
Beginning of year	12,067,732,648	458,150,586	12,525,883,234
End of year	$ 9,987,481,670	$ 405,426,213	$ 10,392,907,883

See accompanying notes to financial statements.

Notes to Financial Statements
June 30, 2023 and 2022

(1) Reporting Entity

The Oklahoma Public Employees Retirement System (OPERS)(the System) is a defined benefit cost-sharing multiple employer plan consisting of a retirement plan and a cost-sharing multiple employer health insurance subsidy plan (HISP) both held in irrevocable trusts. The System, together with other similar fiduciary pension trust funds of the state of Oklahoma (the State), is a component unit of the State. The System is administered by the Oklahoma Public Employees Retirement System. As set forth in Title 74 of the Oklahoma Statutes, at Section 921, administrative expenses are paid with funds provided by operations of the System.

(2) Summary of Significant Accounting Policies

The following are the significant accounting policies followed by the System.

(a) Basis of Accounting

The financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade dates. Member and employer contributions are established by statute as a percentage of salaries and are recognized when due, pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the System.

(b) Investments

The System's investments are presented at fair value. Purchases and sales are recorded at the trade date. At month end, there may be certain pending trades that were initiated by managers, but not confirmed and, therefore, are not included in the fair value of investments. The System is authorized to invest in eligible investments as approved by the Board of Trustees (the Board) as set forth in its investment policy.

System investments are reported at fair value, which is the price that would be received if the investments were sold in an orderly transaction between a willing buyer and a willing seller. Short-term investments include bills and notes, commercial paper, and international foreign currency contracts. Short-term investments, debt securities, and equity securities are reported at fair value, as determined by the System's custodial agent, using pricing services or prices quoted by independent brokers based on the latest reported sales prices at current exchange rates for securities traded on national or international exchanges. The fair value of the pro rata share of units owned by the System in equity index and commingled trust funds is determined by the respective fund trustee based on quoted sales prices of the underlying securities. The investment in real estate is valued using an annual third-party appraisal.

Cash equivalents include investments in money market funds and investment pools and are reported at amortized cost.

Notes to Financial Statements (continued)

Net investment income (loss) includes net appreciation (depreciation) in the fair value of investments, interest income, dividend income, securities lending income and expenses, and investment expenses, which include investment management and custodial fees and all other significant investment related costs. Foreign currency translation gains and losses are reflected in the net appreciation (depreciation) in the fair value of investments.

The System's international investment managers may enter into forward foreign exchange contracts to protect against fluctuation in exchange rates between the trade date and the settlement date of foreign investment transactions. Any gains and losses on these contracts are included in income in the period in which the exchange rates change.

The System's investment policy provides for investments in combinations of stocks, bonds, fixed income securities, and other investment securities along with investments in commingled, mutual, and index funds. Investment securities and investment securities underlying commingled or mutual fund investments are exposed to various risks, such as interest rate and credit risks. Due to the risks associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities may occur in the near term, and those changes could materially affect the amounts reported in the statements of fiduciary net position.

(c) Use of Estimates

Management of the System has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these financial statements in conformity with U.S. generally accepted accounting principles (GAAP), note disclosures and required supplementary information (RSI). Actual results could differ from these estimates.

(d) Risk and Uncertainties

Contributions to the System and the actuarial information included in Note (6) Net Pension (Asset) Liability, Net HISP Asset and Actuarial Information and the RSI are reported based on certain assumptions pertaining to interest rates, inflation rates, and employee compensation and demographics. Due to the changing nature of these assumptions, it is at least reasonably possible that changes in these assumptions may occur in the near term and, due to the uncertainties inherent in setting assumptions, that the effect of such changes could be material to the financial statements.

(e) Composition of Board of Trustees

The Board of Trustees of OPERS consists of fourteen appointed members, some by position and some by association. Those serving through position are a member of the Corporation Commission as selected by the Corporation Commission, a member of the Tax Commission as selected by the Tax Commission, the Administrator of the Office of Personnel Management or designee, the State Insurance Commissioner or designee, the Director of State Finance or designee, and the State Treasurer or designee. Of the remaining members, three are appointed by the Governor, one is appointed by the Supreme Court, two are appointed by the Speaker of the House of Representatives and two are appointed by the President Pro Tempore of the Senate. Qualifications for certain of these appointees include a balance of individuals having experience in investment management, pension management, public fund management, the banking profession or a licensed attorney or a licensed accountant.

Notes to Financial Statements (continued)

(3) System Description and Contribution Information

The following brief description of the System is provided for general information purposes only. Participants should refer to Title 74 of the Oklahoma Statutes, Sections 901 through 932 and 935, as amended, for more complete information.

(a) General

The System is a multiple-employer, cost-sharing public employee retirement plan, which is a defined benefit pension plan covering substantially all state employees except employees covered by seven other plans sponsored by the State. It also covers employees of participating county and local agencies. Nearly all new state employees first employed by a System participating employer on or after November 1, 2015, will participate in the State's new defined contribution plan. Therefore, the System is closed to nearly all new State employees, but remains open to new employees of participating counties and local agencies. Agencies and/or participants not included in the System are as follows: teachers, municipal police, municipal firefighters, judicial, wildlife, state law enforcement and nearly all State employees first employed on or after November 1, 2015.

The System also administers the Health Insurance Subsidy Plan, a cost-sharing multiple-employer defined benefit OPEB (Other Post Employee Benefit) plan that provides OPEB covering the same categories of employees covered by the pension plan.

The supervisory authority for the management and operation of the System and HISP is the Board, which acts as a fiduciary for investment of the funds and the application of System interpretations. At June 30, the System's membership consisted of:

	2023	2022
Inactive members or their beneficiaries currently receiving benefits	36,899	36,649
Inactive members entitled to but not yet receiving benefits	6,761	6,454
Active members	28,671	29,912
Total	72,331	73,015

Of the inactive members or their beneficiaries currently receiving benefits 13,166 and 13,468 are retirees and beneficiaries in the HISP as of June 30, 2023 and 2022, respectively. The Plan also includes 60,239 and 58,803 nonvested terminated members entitled to a refund of their member contributions as of June 30, 2023 and 2022, respectively.

For purposes of the discussion on benefits and contributions, the members are described in the following categories: hazardous duty members, which includes certain employees of the Department of Corrections who are classified as correction officers, probation and parole officers, and fugitive apprehension agents along with Oklahoma Military Department firefighters; elected officials, which includes elected officials who serve the State and participating counties; and State, county, and local agency employees, which includes all other employees previously described. If the member category is not specifically identified, the attributes of the System discussed apply to all members.

Notes to Financial Statements (continued)

(b) Benefits

Pensions

Members qualify for full retirement benefits at their specified normal retirement age or, for any person who became a member prior to July 1, 1992, when the sum of the member's age and years of credited service equals or exceeds 80 (Rule of 80), and for any person who became a member after June 30, 1992, when the member's age and years of credited service equals or exceeds 90 (Rule of 90). Normal retirement date is further qualified to require that all members employed on or after January 1, 1983 must have six or more years of full-time equivalent employment with a participating employer before being eligible to receive benefits. Credited service is the sum of participating and prior service. Prior service includes nonparticipating service before January 1, 1975, or the entry date of the employer and active wartime military service.

A member with a minimum of ten years of participating service may elect early retirement with reduced benefits beginning at age 55 if the participant became a member prior to November 1, 2011, or age 60 if the participant became a member on or after November 1, 2011.

Disability retirement benefits are available for members having eight years of credited service whose disability status has been certified as being within one year of the last day on the job by the Social Security Administration. Disability retirement benefits are determined in the same manner as retirement benefits, but payable immediately without an actuarial reduction.

Health Insurance Subsidy Plan

HISP provides a health insurance premium subsidy for retirees of the System who elect to maintain health insurance with the Oklahoma Employees Group Insurance Division (EGID) or other qualified insurance plan provided by the employer. This subsidy continues until the retiree terminates health insurance coverage with EGID or other qualified plan, or until death. The subsidy is only for the retiree, not joint annuitants or beneficiaries.

The following are various benefit attributes for each member category:

State, County, and Local Agency Employees

Benefits are determined at 2% of the average annual salary received during the highest thirty-six months of the last ten years of participating service, but not to exceed the applicable annual salary cap, multiplied by the number of years of credited service. Members who join OPERS on or after July 1, 2013, will have their salary averaged over the highest 60 months of the last ten years. Normal retirement age under the System is 62 or Rule of 80/90 if the participant became a member prior to November 1, 2011, or age 65 or Rule of 90 if the participant became a member on or after November 1, 2011.

Members who elect to pay the additional contribution rate, which became available in January 2004, will receive benefits using a 2.5% computation factor for each full year the additional contributions are made. In 2004, legislation was enacted to provide an increased benefit to retiring members who were not yet eligible for Medicare. The Medicare Gap benefit option became available to members under age 65 who retired on or after May 1, 2006. Members may elect to receive a temporary increased benefit to cover the cost of health insurance premiums until the member is eligible to receive Medicare. After the member becomes eligible for Medicare, the retirement benefit will be permanently reduced by an actuarially determined amount. The option is irrevocable, must be chosen prior to retirement, and is structured to have a neutral actuarial cost to the System.

Notes to Financial Statements (continued)

Members become eligible to vest fully upon termination of employment after attaining eight years of credited service, or the members' contributions may be withdrawn upon termination of employment.

Elected Officials

Benefits are determined as the greater of the calculation described in the preceding section or, based on the official's contribution election, either 1.9% or 4.0% of the highest annual covered compensation received as an elected official, but not to exceed the applicable annual salary cap, multiplied by the number of years of credited service. For members elected prior to November 1, 2011, normal retirement age under the System is 60 with six years of participation as an elected official or Rule of 80. For members elected on or after November 1, 2011, the normal retirement age is 62 with 10 years of participation as an elected official or 65 with eight years of participation as an elected official. Members elected prior to November 1, 2011 become eligible to vest fully upon termination of employment after attaining six years of participating service as an elected official. Members elected on or after November 1, 2011 become eligible to vest fully upon termination of employment after attaining eight years of participating service as an elected official. The members' contributions may be withdrawn upon termination of employment.

Hazardous Duty Members

Benefits are determined at (a) 2.5% of the final average compensation up to the applicable annual salary cap multiplied by the number of years of service as a hazardous duty member not to exceed 20 years and (b) 2.0% of the final average compensation multiplied by the number of years of service in excess of 20 years and any other years of service creditable. Normal retirement age under the System is 62 or at completion of 20 years of creditable service as a hazardous duty member or Rule of 80/90 if participant became a member prior to November 1, 2011, or age 65 or at completion of 20 years of creditable service as a hazardous duty member or Rule of 90 if participant became a member on or after November 1, 2011.

Military Department firefighters are not restricted to a maximum of 20 years of hazardous duty for the 2.5% computation.

However, members who contributed prior to July 1, 1990 but do not qualify for normal retirement as a hazardous duty member shall receive benefits computed at 2.5% of the final compensation for those full time years as a hazardous duty member after July 1, 1990, 2.25% before July 1, 1990, and 2.0% for all other years of credited service. Members become eligible to vest fully after 20 years of full-time service as a hazardous duty member.

Upon the death of an active member, the accumulated contributions of the member are paid to the member's named beneficiary(ies) in a single lump sum payment. If a retired member elected a joint annuitant survivor option or an active member was eligible to retire with either reduced or unreduced benefits or eligible to vest the retirement benefit at the time of death, benefits can be paid in monthly payments over the life of the spouse if the spouse so elects.

Benefits are payable to the surviving spouse of an elected official only if the elected official had at least six years of participating elected service and was married at least three years immediately preceding death. Survivor benefits are terminated upon death of the named survivor and, for elected officials, remarriage of the surviving spouse. Upon the death of a retired member, with no survivor benefits payable, the member's beneficiary(ies) are paid the excess, if any, of the member's accumulated contributions over the sum of all retirement benefit payments made.

Notes to Financial Statements (continued)

Upon the death of a retired member, the System will pay a $5,000 death benefit to the member's beneficiary or estate of the member if there is no living beneficiary. The death benefit will be paid in addition to any excess employee contributions or survivor benefits due to the beneficiary. Death benefits paid for the years ended June 30, 2023, and 2022 totaled approximately $5,739,000 and $6,288,000, respectively.

Legislation was enacted in 1999 which provided a limited additional benefit for certain terminated members eligible to vest as of July 1, 1998. This limited benefit is payable as an additional $200 monthly benefit upon the member's retirement up to the total amount of certain excess contributions paid by the participant to the System. In April 2001, limited benefit payments began for qualified retired members.

Benefits are established and may be amended by the State Legislature from time to time.

(c) Contributions

The contribution rates for each member category of the System are established by the Oklahoma Legislature after recommendation by the Board based on an actuarial calculation, which is performed to determine the adequacy of such contribution rates. An actuarially determined portion of the total contributions to the System is set aside to finance the cost of the benefits of the HISP in accordance with provisions of the Internal Revenue Code.

Each member participates based on their qualifying gross salary earned, excluding overtime. There is no cap on the qualifying gross salary earned, subject to Internal Revenue Service (IRS) limitations on compensation. Only employers contribute to the HISP.

The following contribution rates were in effect:

State, County, and Local Agency Employees

For 2023 and 2022, *state agency employers* contributed 16.5% on all salary, and *state employees* contributed 3.5% on all salary.

For 2023 and 2022, contributions of *participating county and local agencies* totaled 20.0% of salary composed of a minimum employee contribution rate of 3.5% up to a maximum of 8.5% and a minimum employer contribution rate of 11.5% up to a maximum of 16.5%.

Members have the option to elect to increase the benefit computation factor for all future service from 2.0% to 2.5%. The election is irrevocable, binding for all future employment under OPERS, and applies only to full years of service. Those who make the election pay the standard contribution rate plus an additional contribution rate, 2.91% which is actuarially determined. The election is available for all state, county, and local government employees, except for elected officials and hazardous duty members.

Elected Officials

Elected officials' employee contributions are based on the maximum compensation levels set for all members, and the participating employers are required to contribute on the elected officials' covered salary using the same percentage and limits as applicable for state agencies. Members elected prior to November 1, 2011 must select an employee contribution rate of 4.5%, 6.0%, 7.5%, 8.5%, 9.0% or 10.0%. Members elected on or after November 1, 2011 have a contribution rate of 3.5%.

Notes to Financial Statements (continued)

Effective July 1, 1999, elected officials must affirmatively elect or decline participation in the System within 90 days after taking office. This decision is irrevocable, and failure of an elected official to decline to participate in the System will be deemed as an irrevocable election to participate and contribute at the highest rate (currently 3.5% for officials elected on or after November 1, 2011). All current elected officials who had not elected to participate in the System must have either elected, including selecting a contribution rate, or declined to participate in the System on or before December 1, 1999.

Elected officials who are first elected or appointed to an elected office between November 1, 2010 and October 31, 2011 may only select one of two benefit computation factors - 1.9% or 4.0% - with the respective employee contribution rates of 4.5% or 10.0%.

Effective November 1, 2011, elected officials who are first elected or appointed to an elected office participate with a benefit computation factor of 2.0% with an employee contribution rate of 3.5%.

Hazardous Duty Members

For 2023 and 2022, hazardous duty members contributed 8.0%, and their employer agencies contributed 16.5% on all salary.

(d) Participating Employers

At June 30, the number of participating employers for the pension plan and the HISP plan was as follows:

	2023	2022
State agencies	118	117
County governments	75	75
Local government towns and cities	29	29
Other local governmental units	67	67
Total	289	288

(e) Defined Contribution System created for New Members

House Bill 2630 and Senate Bill 2120 directed OPERS to establish a defined contribution retirement system for members first employed by a participating employer of the system on or after November 1, 2015, including statewide elected officials and legislators. The provisions of this bill are not applicable to hazardous duty members, district attorneys, assistant district attorneys or other employees of the district attorney's office who will continue to participate in the defined benefit plan. Also excluded from the plan are employees of a county, county elected officials, county hospital, city or town, conservation district, circuit engineering district, and any public or private trust in which a county, city or town participates and is the primary beneficiary.

This new defined contribution plan was created and implemented during the year ended June 30, 2016. Under this new plan, participating employees contribute a minimum of 4.5% of their compensation. Participating employers match employee contributions up to 7.0%. In addition to the matching contributions, participating employers are required to remit to OPERS the difference between the matching contributions for defined contribution plan members and the amount the participating employer would have contributed for a defined benefit plan member.

Notes to Financial Statements (continued)

(4) Cash Equivalents

Cash and cash equivalents represent short-term investment funds held by the Office of the State Treasurer (State Treasurer) and the System's custodial agent, and foreign currency.

At June 30, cash and cash equivalents were:

	2023	2022
Cash equivalents		
State Treasurer	$ 7,195,537	$ 5,730,617
Custodial agent	112,094,734	172,595,785
Foreign currency	1,472,142	2,965,352
Total cash and cash equivalents	$ 120,762,413	$181,291,754

Cash is deposited to *OK INVEST*, an internal investment pool of the State Treasurer with holdings limited to obligations of the U.S. Government, its agencies and instrumentalities, agency senior debt and mortgage-backed pass-through securities, tri-party repurchase agreements, money market mutual funds, collateralized certificates of deposit, commercial paper, obligations of state and local governments, and State of Israel Bonds. Participants are limited to qualifying agencies and funds within the State's reporting entity, and each participant maintains an interest in the underlying investments of *OK INVEST* and shares the risk of loss on the fund in proportion to the respective investment in the fund. The custodial agent cash equivalents consist of temporary investments in commingled trust funds of the System's custodial agent. The fund is composed of high-grade money market instruments with short maturities. Each participant in the fund shares the risk of loss on the fund in proportion to the respective investment in the fund.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are uncollateralized, collateralized with securities held by the pledging financial institution, or collateralized with securities held by the pledging financial institution's trust department or agency but not in the depositor-government's name. At June 30, 2023 and 2022, the cash equivalents in *OK INVEST* and the System's custodial agent cash equivalents were not exposed to custodial credit risk because their existence cannot be evidenced by securities that exist in physical or book entry form.

The System holds foreign currency in banks outside the United States as a result of transactions of international investment managers. The foreign currency is in accounts in the name of the System's custodial agent and is uncollateralized, and the System is exposed to custodial credit risk. At June 30, 2023 and 2022, the foreign currency holdings were $1,472,142 and $2,965,352, respectively. The System's exposure to foreign currency risk is detailed in the section entitled Investments, Foreign Currency Risk.

(5) Investments

(a) General

Investments are pooled for administrative purposes and then allocated to the pension plan and HISP based on actuarial data, inflows and outflows. The OPERS Statement of Investment Policy states that the Board believes that System assets should be managed in a fashion that reflects the System's unique liabilities and funding resources, incorporating accepted investment theory and reliable empirical evidence. Specifically, the Board has adopted the following principles:

- Asset allocation is the key determinant of return, and therefore, commitments to asset allocation targets will be maintained through a disciplined rebalancing program.
- Diversification, both by and within asset classes, is the primary risk control element.

Notes to Financial Statements (continued)

- Passive fund portfolios are suitable investment strategies, especially in highly efficient markets. These index funds which are externally managed by professional investment management firms selected through due diligence of the Board are deemed to be actively managed accounts within the meaning of Section 909.1(D) of Title 74 of the Oklahoma Statutes.

The investment policy, guidelines, and objectives which govern the investment of System and HISP assets shall be developed and adopted by the Board of Trustees at a regularly scheduled public Board meeting, at least annually, prior to August 1 of each year. Changes to the investment policy may be made, as necessary, at any public meeting of the Board of Trustees, in compliance with the Open Meeting Act. During 2015, the investment policy was modified to allow investments in certain real estate-related assets.

The asset allocation guidelines established by policy at June 30, 2023 and 2022, were U.S. equities – 40%, international equities – 28% and domestic fixed income – 32%. The guidelines also establish minimum and maximum percentages for each asset class allocation, and when allocations move outside these limits, portfolios are rebalanced.

The fair value of investments held by the System at June 30 was as follows:

	2023	2022
U.S. Treasury notes/bonds	$ 1,221,338,128	$ 1,097,903,588
U.S. TIPS index fund	399,053,729	404,365,667
Government agencies	39,510,329	37,771,967
Government mortgage-backed securities	851,427,557	812,347,271
Foreign bonds	19,027,386	34,239,652
Municipal bonds	15,435,353	18,359,694
Corporate bonds	646,572,898	833,285,027
Asset-backed securities	165,282,626	132,791,523
Commercial mortgage-backed securities	70,298,420	94,297,124
Non government backed collateralized mortgage obligations	72,239,643	61,035,247
Other fixed income	1,457,929	1,843,553
Domestic equities	2,301,365,731	2,116,624,322
U.S. equity index fund	2,279,331,893	2,009,349,942
International equities	1,027,014,888	906,295,021
International equity index funds	2,127,288,981	1,930,657,567
Real estate	9,650,000	8,650,000
Securities lending collateral	348,119,607	481,838,462
Total investments	$ 11,594,415,098	$ 10,981,655,627

The System participates in fixed income and international and domestic equity index funds managed by BlackRock Institutional Trust Company, N.A. (BTC). BTC, a subsidiary of BlackRock Inc., is a national banking association and operates as a limited purpose trust company. Its primary regulator is the Office of the Comptroller of the Currency (OCC), the agency of the U.S. Treasury Department that regulates United States national banks. Each fund is a collective fund which is a group trust and an entity separate from BTC, other funds, and the investing participants. BTC is trustee of each of the collective fund trusts and holds legal title to each trust's assets for the exclusive benefit of the System. The fair value of the System's position in the pool is the same as the value of the pool shares. As of June 30, 2023 and 2022, the System was invested in two domestic equity index funds, two international equity index funds, and a fixed income index fund.

Notes to Financial Statements (continued)

The System shares the risk of loss in these funds with other participants in proportion to its respective investment. Because the System does not own any specific identifiable investment securities of these funds, the risk associated with any derivative investments held in these funds is not apparent. The degree of risk depends on the underlying portfolios of the funds, which were selected by the System in accordance with its investment policy guidelines including risk assessment.

The international funds invest primarily in equity securities of entities outside the United States and may enter into forward contracts to purchase or sell securities at specified dates in the future at a guaranteed price in a foreign currency to protect against fluctuations in exchange rates of foreign currency.

Securities Lending

The System's investment policy provides for its participation in a securities lending program. The program is administered by the System's master custodian, and there are no restrictions on the amount of loans that can be made. During 2023 and 2022, the types of securities loaned were primarily U.S. Government and corporate bonds, domestic equity securities, and international equity securities. Certain securities of the System are loaned to participating brokers, who must provide collateral in the form of cash, U.S. Treasury or Government Agency securities, or letters of credit issued by approved banks.

Under the terms of the securities lending agreement, collateral is required to be provided in the amount of 102% of the fair value of U.S. securities loaned and 105% of the fair value of non-U.S. securities loaned. At June 30, 2023 and 2022, the System had no credit risk exposure to borrowers because the amounts the System owes the borrowers exceed the amounts the borrowers owe the System. The market values of the cash and non-cash collateral for those securities on loan were $348,119,607 and $502,935,256 in FY2023 and $481,838,462 and $342,502,842 in FY2022.
The master custodian provides for full indemnification to the System for any losses that might occur in the program due to the failure of a broker to return a security that was borrowed (and if the collateral is inadequate to replace the securities lent) or failure to pay the System for income of the securities while on loan. The loan premium paid by the borrower of the securities is apportioned between the System and its custodial agent in accordance with the securities lending agreement. All securities loans can be terminated on demand by either the lender or the borrower. Securities on loan as of June 30, 2023 and 2022 are as follows:

Securities On Loan		2023	%		2022	%
Collateralized by Cash Collateral	$	341,719,802	41%	$	466,686,486	58%
Collateralized by non- Cash Collateral		491,454,605	59%		332,933,197	42%
Total	$	833,174,407	100%	$	799,619,683	100%

The securities lending agreement provides that cash collateral be invested in the custodial agent's short-term investment pool and sets forth credit-quality standards, acceptable investments, diversification standards, and maturity and liquidity constraints for the investment fund. The System's investment guidelines do not require a matching of investment maturities with loan maturities but do establish minimum levels of liquidity and other investment restrictions designed to minimize the interest rate risk associated with not matching the maturities of the investments with the loans. The table above shows the amount of cash and non-cash collateral for the respective years. At June 30, 2023 and 2022, the cash collateral investments had an average weighted maturity of 11 and 13 days, respectively, and the relationship between the maturities of the custodial agent's investment pool and the System's loans is affected by the maturities of the securities loans made by other entities that use the agent's pool, which the System cannot determine.

Notes to Financial Statements (continued)

The System's non-cash collateral is represented by its allocated share of a pool administered by the agent for the System and other pool participants and the System cannot pledge or sell them unless the borrower defaults and thus, is not included in the statements of fiduciary net position.

(b) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will default or will otherwise not fulfill its obligations.

The System's investment guidelines provide for the domestic fixed income managers to follow one of four investment styles and specifies quality guidelines for each style.

The *Constrained Core* manager will invest in a broadly diversified portfolio with characteristics similar to a broad fixed income market index, such as the Barclays Capital Aggregate Bond Index. The total portfolio minimum quality should be single-A as rated by a nationally recognized statistical rating organization (NRSRO). The portfolio should primarily consist of investment grade securities, with a minimum quality rating for any issue of triple-B minus rating by at least one NRSRO. In the event that a credit rating is downgraded below this minimum, the investment manager shall immediately notify OPERS staff and provide an evaluation and recommended course of action.

The *Core Plus* manager will invest in a broadly diversified portfolio with characteristics similar to the Constrained Core manager and will add a "plus" of limited exposure to high yield bonds. The total portfolio minimum quality should be single-A as rated by an NRSRO. No more than 20% of the portfolio shall consist of non-investment grade issues. The minimum quality rating for any issue is single-B rating by at least one NRSRO, and no more than 5% of a portfolio shall be invested in issues rated below double-B rating by at least one NRSRO. In the event that a credit rating is downgraded below this minimum, the investment manager shall immediately notify OPERS staff and provide an evaluation and recommended course of action.

The *Interest Rate Anticipator* manager follows a style that seeks to correctly forecast the long-term trend in interest rates and adjust the portfolio duration accordingly. The total portfolio minimum quality should be single-A as rated by an NRSRO, and the portfolio should consist of investment grade securities only.

The *Passive* fixed income style consists of a Treasury Inflation-Protection Securities (TIPS) index fund. TIPS are securities issued by the U.S. Government that are designed to protect the purchasing power of the investor.

At June 30, 2023, the domestic fixed income portfolio consisted of a constrained core fixed income portfolio, a core plus fixed income portfolio, a rate anticipator portfolio, and a passive U.S. TIPS Index fund. All components met the stated policy restrictions except the core fixed income portfolio, which held $4,998,388 in issues rated below triple-B minus, and the core plus fixed income portfolio, which held $14,400,704 in issues rated below single-B. The System's investment managers have advised retention of the securities after having assessed their risk/reward profiles. At June 30, 2022, the domestic fixed income portfolio consisted of a constrained core fixed income portfolio, a core plus fixed income portfolio, a rate anticipator portfolio, and a passive U.S. TIPS Index fund. All components met the stated policy restrictions except the core fixed income portfolio, which held $12,104,973 in issues rated below triple-B minus, and the core plus fixed income portfolio, which held $16,550,358 in issues rated below single-B. The System's investment managers have advised retention of the securities after having assessed their risk/reward profiles.

Notes to Financial Statements (continued)

Investments issued by or explicitly guaranteed by the U.S. Government are not considered to have credit risk. At June 30, 2023, the System held 35.3% of fixed income investments that were not considered to have credit risk and 11.4% in a U.S. TIPS index fund made up of explicitly guaranteed U.S. Treasury Inflation-Protected Securities. At June 30, 2022, the System held 31.6% of fixed income investments that were not considered to have credit risk and 11.5% in a U.S. TIPS index fund made up of explicitly guaranteed U.S. Treasury Inflation-Protected Securities. Implicitly guaranteed investments primarily refer to bonds issued by a government sponsored entity (GSE) which is a government-chartered corporation. This government charter implies that the government is unlikely to allow a GSE to default on its bond payments.

The System's exposure to credit risk at June 30, 2023 is presented below, in thousands, by investment category as rated by an NRSRO.

	Triple-A	Double-A	Single-A	Triple-B	Double-B	Single-B	Triple-C	Double-C	Not Rated or Rating Not Available	Total
Government agencies	$ -	$ 504	$ 437	$ 3,027	$ -	$ -	$ -	$ -	$ -	$ 3,968
Municipal bonds	4,619	10,456	173	187	-	-				15,435
Foreign government bonds	-	371	1,342	10,582	6,732	-	-	-	-	19,027
Corporate bonds	4,221	24,173	251,969	348,759	6,745	10,191	57	-	458	646,573
Asset-backed securities	141,988	15,575	6,689	-	601	385	45	-	-	165,283
Commercial mortgage-backed securities	58,074	8,751	950	1,737	786	-	-	-	-	70,298
Non government backed collateralized mortgage obligations	57,211	3,050	70	5,024	3,286	3,599	-	-	-	72,240
Other fixed Income	-	-	468	990	-	-	-	-	-	1,458
Total fixed income securities exposed to credit risk	$ 266,113	$ 62,880	$ 262,098	$ 370,306	$ 18,150	$ 14,175	$ 102	$ -	$ 458	$ 994,282
Percent of total fixed income portfolio	7.6%	1.8%	7.5%	10.6%	0.5%	0.4%	0.0%	0.0%	0.0%	28.4%

The System's exposure to credit risk at June 30, 2022 is presented below, in thousands, by investment category as rated by an NRSRO.

	Triple-A	Double-A	Single-A	Triple-B	Double-B	Single-B	Triple-C	Double-C	Not Rated or Rating Not Available	Total
Government agencies	$ 901	$ 513	$ 457	$ 2,310	$ 728	$ -	$ -	$ -	$ -	$ 4,909
Municipal bonds	2,148	11,968	3,859	385	-	-				18,360
Foreign government bonds	1,529	1,012	2,267	21,530	7,738	164	-	-	-	34,240
Corporate bonds	38,253	15,383	255,299	500,697	15,645	5,308	-	-	2,700	833,285
Asset-backed securities	107,231	14,425	4,203	-	562	4,517	1,233	620	-	132,791
Commercial mortgage-backed securities	81,504	8,431	1,594	831	1,937	-	-	-	-	94,297
Non government backed collateralized mortgage obligations	46,499	3,617	105	2,835	2,608	3,162	2,209	-	-	61,035
Other fixed Income	-	-	844	1,000	-	-	-	-	-	1,844
Total fixed income securities exposed to credit risk	$ 278,065	$ 55,349	$ 268,628	$ 529,588	$ 29,218	$ 13,151	$ 3,442	$ 620	$ 2,700	$1,180,761
Percent of total fixed income portfolio	7.9%	1.6%	7.6%	15.0%	0.8%	0.4%	0.1%	0.0%	0.1%	33.5%

The exposure to credit risk of the underlying investments of the System's cash equivalents at June 30 is 100% invested in Double-A credit rating at June 30, 2023 and 2022.

Notes to Financial Statements (continued)

(c) Concentration of Credit Risk

Investments can be exposed to concentration of credit risk if significant amounts are invested in any one issuer. The System's investment policy states that portfolios managed on behalf of the System should not hold more than 5% of the outstanding securities of any single issuer. As of June 30, 2023, and 2022, the System did not have 5% or more of its total investments in any single issuer.

(d) Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment or a deposit. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates based upon the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. Effective duration estimates the sensitivity of a bond's price to interest rate changes and makes assumptions regarding the most likely timing and amounts of variable cash flows arising from investments, such as callable bonds, collateralized mortgage obligations, and other mortgage-backed securities.

At June 30, the System's exposure to interest rate risk as measured by effective duration is listed below by investment category.

	2023		2022	
	Fair Value	**Effective duration in years**	**Fair Value**	**Effective duration in years**
U.S. Treasury notes/bonds	$ 1,221,338,128	9.1	$ 1,097,903,588	10.3
U.S. TIPS index fund	399,053,729	6.7	404,365,667	6.9
Government agencies	39,510,329	8.5	37,771,967	3.7
Government mortgage-backed securities	851,427,557	7.5	812,347,271	7.8
Foreign bonds	19,027,386	6.6	34,239,652	7.2
Municipal bonds	15,435,353	10.1	18,359,694	10.1
Corporate bonds	646,572,898	6.6	833,285,027	6.0
Asset-backed securities	165,282,626	1.8	132,791,523	1.4
Commercial mortgage-backed securities	70,298,420	2.7	94,297,124	3.0
Non government backed collateralized mortgage obligations	72,239,643	3.2	61,035,247	3.0
Other fixed income	1,457,929	6.1	1,843,553	5.8
Total fixed income	$ 3,501,643,998		$ 3,528,240,313	
Porfolio duration		7.4		7.5

The System does not have a formal investment policy on interest rate risk. Interest rate risk is controlled through diversification of portfolio management styles.

Some investments' sensitivity to changing interest rates may derive from prepayment options embedded in an investment. Asset-backed securities, mortgage-backed securities, and collateralized mortgage obligations are pass-through securities that represent pooled debt obligations repackaged as securities that pass income and principal from debtors through the intermediary to investors.

Notes to Financial Statements (continued)

Asset-backed securities are bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other providers of credit and often enhanced by a bank letter of credit or by insurance coverage proved by an institution other than the issuer. At June 30, 2023 and 2022, the System held $165,282,626 and $132,791,523, respectively, in asset-backed securities.

Mortgage-backed securities are securities backed by mortgages issued by public and private institutions. At June 30, 2023 and 2022, the System held $851,427,557 and $812,347,271, respectively, in government mortgage-backed securities issued by the Federal Home Loan Mortgage Corporation (FHLMC), Government National Mortgage Association (GNMA), and Federal National Mortgage Association (FNMA) as well as $70,298,420 and $94,297,124, respectively, in commercial mortgage-backed securities.

Collateralized mortgage obligations (CMOs) are mortgage-backed bonds that allocate mortgage cash flows (interest and principal) into different maturity classes, called tranches. This is accomplished by dedicating mortgage cash flows to specific tranches and paying each tranche off in turn by prespecified rules. CMOs provide investors with increased security about the life of their investment compared to purchasing a pass-through mortgage-backed security. If mortgage rates drop (rise) sharply, prepayment rates will increase (decrease), and CMO tranches may be repaid before (after) the expected maturity. At June 30, 2023 and 2022, the System held $72,239,643 and $61,035,247, respectively, in non-government backed CMOs.

The exposure to interest rate risk of the underlying investments of the System's cash equivalents at June 30 is as follows:

Maturities (in days)	**2023**	**2022**
0 - 14	47.3 %	33.3 %
15 - 30	2.8	7.1
31 - 60	14.2	11.3
61 - 90	16.7	18.1
91 - 180	7.4	9.2
181 - 364	10.6	20.0
365 - 730	1.0	1.0
	100.0 %	100.0 %

(e) 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. The OPERS Statement of Investment Policy addresses foreign currency risk by stating that the primary sources of value-added for international equity investment managers will be issue and country selection, with currency management focused on limiting losses due to fluctuations in currency values.

Notes to Financial Statements (continued)

The System's exposure to foreign currency risk by asset class at June 30, 2023 is as follows:

Currency	Equities	Short-term Investments	Cash	Total	Percent
Australian dollar	$ 16,555,704	$ -	$ -	$ 16,555,704	0.5 %
Brazilian real	13,015,964	-	-	13,015,964	0.4
British pound sterling	149,825,181	-	120,109	149,945,290	4.7
Canadian dollar	17,475,144	-	4	17,475,148	0.6
Danish krone	3,332,402	-	-	3,332,402	0.1
Euro	237,229,466	-	-	237,229,466	7.5
Hong Kong dollar	101,717,104	51,667	89,450	101,858,221	3.2
Indonesian rupiah	4,684,303	-	-	4,684,303	0.1
Japanese yen	204,348,360	(327,035)	527,609	204,548,934	6.5
Malaysian ringgit	3,141,560	-	-	3,141,560	0.1
Mexican peso	5,640,410	-	150,437	5,790,847	0.2
Polish zloty	-	-	407	407	0.0
Singapore dollar	20,618,105	-	-	20,618,105	0.7
South Korean won	31,458,069	-	-	31,458,069	1.0
Swedish krona	23,515,891	-	17,463	23,533,354	0.7
Swiss franc	26,214,551	-	-	26,214,551	0.8
International portfolio exposed to foreign currency risk	858,772,214	(275,368)	905,479	859,402,325	27.2
International portfolio in U.S. dollars	2,295,532,134	2,702,347	(1,358)	2,298,233,123	72.8
Total international portfolio	$ 3,154,304,348	$ 2,426,979	$ 904,121	$ 3,157,635,448	100.0 %

The System's exposure to foreign currency risk by asset class at June 30, 2022 is as follows:

Currency	Equities	Short-term Investments	Cash	Total	Percent
Australian dollar	$ 11,942,427	$ -	$ -	$ 11,942,427	0.4 %
Brazilian real	10,198,532	-	-	10,198,532	0.4
British pound sterling	138,757,369	(486,551)	1,318,043	139,588,861	4.8
Danish krone	2,682,919	-	-	2,682,919	0.1
Euro	191,554,748	1,840,498	95,477	193,490,723	6.7
Hong Kong dollar	117,955,233	(987,766)	90,542	117,058,009	4.1
Indonesian rupiah	4,351,271	-	-	4,351,271	0.2
Japanese yen	186,936,214	(217,404)	736,767	187,455,577	6.5
Mexican peso	4,753,169	319,052	-	5,072,221	0.2
Polish zloty	-	-	368	368	0.0
Singapore dollar	20,906,942	(11,142)	11,142	20,906,942	0.7
South Korean won	28,950,026	931,966	-	29,881,992	1.0
Swedish krona	25,482,374	(177,653)	144,992	25,449,713	0.9
Swiss franc	23,782,608	-	-	23,782,608	0.8
International portfolio exposed to foreign currency risk	768,253,832	1,211,000	2,397,331	771,862,163	26.8
International portfolio in U.S. dollars	2,068,703,858	36,837,222	5,075,148	2,110,616,228	73.2
Total international portfolio	$ 2,836,957,690	$ 38,048,222	$ 7,472,479	$ 2,882,478,391	100.0 %

The System's actively-managed international equity securities are recorded at fair value, which includes foreign currency gains and losses attributable to fluctuations in the exchange rate between the foreign denominated currency of the investment and the U.S. dollar. This translation gain or loss is calculated based on month-end exchange rates. Cumulative unrealized translation losses at June 30, 2023 and 2022 were approximately $69.3 and $91.9 million, respectively.

Notes to Financial Statements (continued)

(f) Rate of Return

For the year ended June 30, 2023 and 2022, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 10.89% and -14.61% respectively, and the annual money-weighted rate of return on HISP plan investments, net of HISP plan investment expenses, was 7.66% and -11.30% respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

(g) Fair Value Measurement

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to quoted prices in active markets for identical assets (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The inputs to the three levels of the fair value hierarchy are described as follows:

Level 1: Quoted prices in active markets for identical assets or liabilities

Level 2: Significant other observable inputs, including quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets in markets that are not active and other market corroborated inputs

Level 3: Significant unobservable inputs

Investments in equity securities classified in level 1 are valued directly from a predetermined primary external pricing vendor using published prices. Investments in debt securities classified as level 2 are obtained from using an alternative pricing source due to lack of information by the primary vendor. The investment in real estate is classified as level 3 due to lack of observable pricing inputs and is valued using annual appraisals.

Notes to Financial Statements (continued)

Assets measured at fair value and net asset value on June 30, 2023 are as follows:

		Fair Value Measurements Using		
Investments by Fair Value Level	**6/30/2023**	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Short-term investment fund	$ 109,619,001	$ -	$ 109,619,001	$ -
Debt Securities				
U.S. Treasury notes/bonds	1,221,338,128	-	1,221,338,128	-
Government agencies	39,510,329	-	39,510,329	-
Government mortgage-backed securities	851,427,557	-	851,427,557	-
Foreign bonds	19,027,386	-	19,027,386	-
Municipal bonds	15,435,353	-	15,435,353	-
Corporate bonds	646,572,898	-	646,572,898	-
Asset-backed securities	165,282,626	-	165,282,626	-
Commercial mortgage-backed securities	70,298,420	-	70,298,420	-
Non government backed collateralized m	72,239,643	-	72,239,643	-
Other fixed income	1,457,929		1,457,929	
Total Debt Securities	3,102,590,269	-	3,102,590,269	-
Equity Securities				
International equities	1,027,014,888	1,027,014,888	-	-
U.S. common and preferred stock	2,301,365,731	2,301,365,731	-	-
Total Equity Securities	3,328,380,619	3,328,380,619	-	-
Real estate				
Real estate	9,650,000	-	-	9,650,000
Total Investments by Fair Value Level	$ 6,440,620,888	$ 3,328,380,619	$ 3,102,590,269	$ 9,650,000
Investments Measured at the Net Asset Value (NAV)				
U.S. TIPS index fund	$ 399,053,729			
International equity index funds	2,127,288,981			
U.S. equity index fund	2,279,331,893			
Total Investments Measured at NAV	4,805,674,603			
Securities lending collateral	348,119,607			
Total Investments	$ 11,594,415,098			

Notes to Financial Statements (continued)

Assets measured at fair value and net asset value on June 30, 2022 are as follows:

		Fair Value Measurements Using		
Investments by Fair Value Level	**6/30/2022**	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Short-term investment fund	$ 168,088,658	$ -	$ 168,088,658	$ -
Debt Securities				
U.S. Treasury notes/bonds	1,097,903,588	-	1,097,903,588	-
Government agencies	37,771,967	-	37,771,967	-
Government mortgage-backed securities	812,347,271	-	812,347,271	-
Foreign bonds	34,239,652	-	34,239,652	-
Municipal bonds	18,359,694	-	18,359,694	-
Corporate bonds	833,285,027	-	833,285,027	-
Asset-backed securities	132,791,523	-	132,791,523	-
Commercial mortgage-backed securities	94,297,124	-	94,297,124	-
Non government backed collateralized mortgag	61,035,247	-	61,035,247	-
Other fixed income	1,843,553		1,843,553	
Total Debt Securities	3,123,874,646	-	3,123,874,646	-
Equity Securities				
International equities	906,295,021	906,295,021	-	-
U.S. common and preferred stock	2,116,624,322	2,116,624,322	-	-
Total Equity Securities	3,022,919,343	3,022,919,343	-	-
Real estate				
Real estate	8,650,000	-	-	8,650,000
Total Investments by Fair Value Level	$ 6,155,443,989	$ 3,022,919,343	$ 3,123,874,646	$ 8,650,000
Investments Measured at the Net Asset Value (NAV)				
U.S. TIPS index fund	$ 404,365,667			
International equity index funds	1,930,657,567			
U.S. equity index fund	2,009,349,942			
Total Investments Measured at NAV	4,344,373,176			
Securities lending collateral	481,838,462			
Total Investments	$ 10,981,655,627			

There have been no significant changes in valuation techniques during the fiscal years ended June 30, 2023 and 2022.

Certain investments that do not have a readily determinable fair value are measured at NAV (or its equivalent), such as member units or an ownership interest. NAV per share is calculated as of the System's year-end and is provided by the investment manager. Redemption information for investments measured at the NAV per share, or equivalent, is presented in the table below.

Investments Measured at the Net Asset Value	**6/30/2023**	**6/30/2022**	**Redemption Frequency**	**Redemption Notice Period**
U.S. TIPS index fund (1)	$ 399,053,729	$ 404,365,667	Daily	2 days
International equity index funds (2)	2,127,288,981	1,930,657,567	Daily	2 days
U.S. equity index fund (3)	2,279,331,893	2,009,349,942	Daily	1 day
	$ 4,805,674,603	$ 4,344,373,176		

Notes to Financial Statements (continued)

[1] **U.S. TIPS index fund** – The US Treasury Inflation Protected Securities fund is an index fund that establishes an objective of delivering investment performance approximating the rate of return for outstanding US Treasury inflation protected securities with a maturity of one year or greater. The investment is valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

[2] **International Equity Index Funds** – The International equity funds consist of index funds that are designed to track various segments of non-US equity markets. Those index funds include the ACWI ex-US Index Fund and the ACWI ex-US Growth Index Fund. The index funds are invested and reinvested in portfolios of non-US developed and emerging markets equity securities, with the objective of approximating the capitalization-weighted return of each respective market segment for publicly traded equity securities. The investment is valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

[3] **U.S. Equity Index Fund** – The US equity fund consist of an index fund that is designed to track various segments of US equity markets. That index fund is the Russell 1000 Index Fund. The index fund is invested and reinvested in portfolios of US equity securities, with the objective of approximating the capitalization-weighted return of each respective market segment for publicly traded equity securities. The investment is valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

(6) Net Pension (Asset) Liability, Net HISP Asset and Actuarial Information

(a) Net Pension (Asset) Liability and Net HISP Asset of Participating Agencies

The components of the net pension (asset) liability of the employers' at June 30 were as follows:

	2023	2022
Total pension liability	$ 11,173,394,259	$ 10,828,046,484
Plan fiduciary net position	10,715,873,451	9,987,481,670
Employers' net pension (asset) liability	$ 457,520,808	$ 840,564,814
Plan fiduciary net position as a percentage of the total pension liability	95.91%	92.24%

The components of the net HISP asset of the employers' at June 30 were as follows:

	2023	2022
Total HISP liability	$ 308,562,138	$ 311,838,597
HISP plan fiduciary net position	436,231,576	405,426,213
Employers' net HISP (asset)	$ (127,669,438)	$ (93,587,616)
Plan fiduciary net position as a percentage of the total HISP liability	141.38%	130.01%

Notes to Financial Statements (continued)

(b) Actuarial Methods and Assumptions

The total pension liability and total HISP liability, both as of June 30, 2023 and 2022, were determined based on actuarial valuations prepared as of July 1, 2023, using the following actuarial assumptions:

- Investment return – 6.50% for 2023 and 2022 compounded annually net of investment expense and including inflation
- Salary increases, including price inflation – 3.25% to 9.25% for 2023 and 2022
- Mortality rates – In 2023 and 2022, Pub-2010 Below Media, General Membership Active/Retiree Healthy Mortality Table with base rates projected to 2030 using Scale MP-2019. Male rates are unadjusted, and female rates are set forward two years.
- No annual post-retirement benefit increases
- Assumed inflation rate – 2.50% for 2023 and 2022
- Payroll growth – 3.25% for 2023 and 2022
- Actuarial cost method – Entry age
- Select period for the termination of employment assumptions – 10 years

The actuarial assumptions used in the July 1, 2023, valuation are based on the results of the most recent actuarial experience study, which covered the three-year period ending June 30, 2022. The experience study report is dated April 12, 2023.

The long-term expected rate of return on pension plan investments and HISP plan investments was determined using a log-normal distribution analysis in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The HISP represents a subsidy that is capped at $105 per month per retiree.

The target asset allocation and best estimates of arithmetic real rates of return for each major class, as used in the June 30, 2022 experience study, are summarized in the following table:

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
U.S. Large Cap Equity	34.0%	5.1%
U.S. Small Cap Equity	6.0%	5.1%
Global Equity ex-US	28.0%	8.2%
Core Fixed Income	25.0%	1.9%
Long Term Treasuries	3.5%	2.1%
US TIPS	3.5%	1.8%
Total	100.0%	

Notes to Financial Statements (continued)

(c) Discount rate

The discount rate used to measure the total pension liability and the total HISP liability was 6.50%, net of investment expenses, for 2023 and 2022. The projection of cash flows used to determine the discount rate assumed that contributions from System members and the employers will be made at the current contribution rate as set out in state statute. Based on those assumptions, the pension plan's fiduciary net position and the HISP's fiduciary net position were projected to be available to make all projected future benefit payments of current System members. Therefore, the long-term expected rate of return on pension plan and HISP plan investments was applied to all periods of projected benefit payments to determine the total pension liability and total HISP liability. The discount rate determined does not use a municipal bond rate.

Sensitivity of the net pension asset and net HISP asset to changes in the discount rate

The following presents the net pension (asset) liability of the employer calculated using the discount rate of 6.50% for 2023 and 2022, as well as what the System's net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	June 30, 2023			June 30, 2022		
	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
Net pension liability (asset)	$ 1,767,226,541	$ 457,520,808	$ (643,711,871)	$ 2,060,228,380	$ 840,564,814	$ (190,917,136)

The following presents the net HISP asset or liability of the employer calculated using the discount rate of 6.50% for 2023 and 2022 as well as what the System's net HISP (asset) liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

	June 30, 2023			June 30, 2022		
	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)	1% Decrease (5.50%)	Current Discount Rate (6.50%)	1% Increase (7.50%)
Net HISP liability (asset)	$ (93,641,814)	$ (127,669,438)	$ (156,605,727)	$ (60,410,410)	$ (93,587,616)	$ (122,014,741)

Due to the structure of the HISP, healthcare cost trend rate sensitivity analysis is not meaningful.

(7) Federal Income Tax Status

Pursuant to a determination by the IRS, the System is qualified under the Internal Revenue Code of 1986, as amended and, therefore, is exempt from federal income taxes. The latest determination letter is dated October 28, 2014 and was a favorable determination for the Oklahoma Public Employees Retirement Plan. The System has been amended since receiving the determination letter; however, the System administrator believes that the System is designed and is currently being operated in substantial compliance with the applicable requirements of the Internal Revenue Code and will retain its status as a qualified plan.

Required Supplementary Information

(Unaudited)

June 30, 2023

Schedule 1

Schedule of Changes in the Net Pension (Asset) Liability ($ in Thousands)

Year Ended June 30,	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability										
Service cost	$ 163,141	$ 166,411	$ 170,303	$ 158,748	$ 162,170	$ 170,490	$ 177,082	$ 178,523	$ 175,809	$ 184,835
Interest	681,376	675,171	668,446	658,714	647,009	640,881	639,266	653,306	635,975	621,990
Benefit changes	-	-	-	182,977	-	8,929	-	-	-	-
Difference between expected and actual experience	23,280	(51,644)	(55,509)	(7,442)	(2,065)	(110,269)	(117,283)	(52,745)	(11,228)	(89,172)
Changes of assumptions	179,262	-	-	538,446	-	-	238,225	233,874	-	15,413
Benefit payments	(688,559)	(675,559)	(661,582)	(628,669)	(621,409)	(592,726)	(573,962)	(565,412)	(542,488)	(520,641)
Refunds of contributions	(13,152)	(11,906)	(10,733)	(14,452)	(15,369)	(15,957)	(15,950)	(15,862)	(15,611)	(14,878)
Net change in total pension liability	345,348	102,473	110,925	888,322	170,336	101,348	347,378	431,684	242,457	197,547
Total pension liability - beginning	10,828,046	10,725,573	10,614,648	9,726,326	9,555,990	9,454,642	9,427,810	8,996,126	8,753,669	8,556,122
Adoption of GASB 74	-	-	-	-	-	-	(320,546)	-	-	-
Total pension liability - ending (a)	$ 11,173,394	$ 10,828,046	$ 10,725,573	$ 10,614,648	$ 9,726,326	$ 9,555,990	$ 9,454,642	$ 9,427,810	$ 8,996,126	$ 8,753,669
Plan Fiduciary Net Position										
Contributions - employer	$ 296,241	$ 283,159	$ 275,343	$ 274,882	$ 263,730	$ 258,907	$ 269,511	$ 296,249	$ 292,185	$ 280,047
Contributions - member	68,660	66,392	66,204	67,808	66,566	66,930	70,276	73,801	73,145	70,524
Net investment income	1,071,681	(1,736,616)	2,681,327	435,320	544,237	734,976	1,013,868	15,756	264,289	1,317,980
Benefit payments	(688,559)	(675,559)	(661,582)	(628,669)	(621,409)	(592,726)	(573,962)	(565,412)	(542,488)	(520,641)
Administrative expense	(6,479)	(5,722)	(5,310)	(5,543)	(5,564)	(5,162)	(5,214)	(5,395)	(5,183)	(4,709)
Refunds of contributions	(13,152)	(11,906)	(10,733)	(14,452)	(15,369)	(15,957)	(15,950)	(15,862)	(15,611)	(14,878)
Net change in plan fiduciary net position	728,392	(2,080,252)	2,345,249	129,346	232,191	446,968	758,529	(200,863)	66,337	1,128,323
Plan fiduciary net position - beginning	9,987,481	12,067,733	9,722,484	9,593,138	9,360,947	8,913,979	8,435,579	8,636,442	8,570,105	7,441,782
Adoption of GASB 74	-	-	-	-	-	-	(280,129)	-	-	-
Plan fiduciary net position - ending (b)	10,715,873	9,987,481	12,067,733	9,722,484	9,593,138	9,360,947	8,913,979	8,435,579	8,636,442	8,570,105
Net pension (asset) liability - ending (a) - (b)	$ 457,521	$ 840,565	$ (1,342,160)	$ 892,164	$ 133,188	$ 195,043	$ 540,663	$ 992,231	$ 359,684	$ 183,564

Schedule of the Net Pension (Asset) Liability ($ in Thousands)

Year Ended June 30,	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	$ 11,173,394	$ 10,828,046	$ 10,725,573	$ 10,614,648	$ 9,726,326	$ 9,555,990	$ 9,454,642	$ 9,427,810	$ 8,996,126	$ 8,753,669
Plan fiduciary net position	10,715,873	9,987,481	12,067,733	9,722,484	9,593,138	9,360,947	8,913,979	8,435,579	8,636,442	8,570,105
Net pension (asset) liability	$ 457,521	$ 840,565	$ (1,342,160)	$ 892,164	$ 133,188	$ 195,043	$ 540,663	$ 992,231	$ 359,684	$ 183,564
Ratio of plan fiduciary net position to total pension liability	95.91%	92.24%	112.51%	91.59%	98.63%	97.96%	94.28%	89.48%	96.00%	97.90%
Covered payroll	$ 1,527,059	$ 1,556,561	$ 1,571,954	$ 1,584,631	$ 1,601,075	$ 1,688,544	$ 1,790,810	$ 1,808,973	$ 1,744,042	$ 1,695,348
Net pension liability as a % of covered payroll	29.96%	54.00%	-85.38%	56.30%	8.32%	11.55%	30.19%	54.85%	20.62%	10.83%

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the information included is for those years for which information is available.

Required Supplementary Information

Schedule of Pension Employer Contributions ($ in Thousands)
(Unaudited)
June 30, 2023
Schedule 2

Year Ended June 30,	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined employer contribution	$ 97,397	$ 116,791	$ 224,843	$ 118,083	$ 129,707	$ 168,494	$ 176,016	$ 164,600	$ 200,784	$ 258,879
Actual employer contributions	296,241	283,159	275,343	274,882	263,730	258,907	269,511	296,249	292,185	280,047
Annul contribution (excess)	$ (198,844)	$ (166,368)	$ (50,500)	$ (156,799)	$ (134,023)	$ (90,413)	$ (93,495)	$ (131,649)	$ (91,401)	$ (21,168)
Covered payroll*	$ 1,527,059	$ 1,556,561	$ 1,571,954	$ 1,584,631	$ 1,601,075	$ 1,688,544	$ 1,790,810	$ 1,808,973	$ 1,744,042	$ 1,695,348
Actual contributions as a percentage of covered payroll*	19.40%	18.19%	17.52%	17.35%	16.47%	15.33%	15.05%	16.38%	16.75%	16.52%

* Covered payroll beginning in 2017 is for the defined benefit plan members only although employer contributions toward the net pension liability are being received on behalf of defined contribution plan members. Note: 2017 was the first year to exclude the health insurance subsidy.

Notes to Schedule

Valuation date:
Actuarially determined contributions are calculated as of the beginning of the fiscal year in which contributions are reported

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, closed
Remaining amortization period	5 years
Asset valuation method	5-year moving average
Inflation	2.50% for 2023, 2022 , 2021 and 2020, and 2.75% 2019, 2018 and 2017, and 3.00% for 2016
Salary increases, including inflation	3.25% to 9.25%
Investment rate of return	6.50% for 2023, 2022, 2021 and 2020, 7.00% for 2019, 2018 and 2017, and 7.25% for 2016, compounded annually, net of investment expense and including inflation
Retirement age	Age 65 for all members hired on or after November 1, 2011, age 62 for members hired prior to November 1, 2011
Mortality	For 2023, 2022 and 2021 - Pub-2010 Below Median, General membership Active/ Retiree Healthy Mortality table with base rates projected to 2030 using Scale MP-2019. For 2023, 2022 and 2021, males rates are unadjusted, and female rates are set forward two years. For 2020 males rates are set back one year, and female rates are set forward one year. For 2019 and 2018, active participants and nondisabled pensioners – RP-2014 Mortality Table projected to 2025 by Scale MP-2016 (disabled pensioners set forward 12 years). For 2016, Active participants and nondisabled pensioners – RP-2000 Mortality Table projected to 2010 by Scale AA (disabled pensioners set forward 15

Other information:

The plan has been amended by House Bill 2630 in 2014 which states that effective November 1, 2015, OPERS shall create a defined contribution plan for most people first employed by a participating employer. Exemptions from the new defined contribution plan include hazardous duty members and district attorneys, assistant district attorneys and employees of the district attorney's office. Each employer shall send to OPERS the difference between the required employer contribution to OPERS and the amount required to match the participating employee's contribution in the defined contribution plan.

Senate Bill 2120, also enacted in 2014, amends House Bill 2630 to further exempt from the new defined contribution plan county elected officials and employees of a county, county hospital, city or town, conservation district, circuit engineering district, and any public or private trust in which a county, city or town participates. Senate Bill 2120 also states that employees who participate in the defined contribution system are excluded from the $105 health subsidy.

New employees specifically exempted from the defined contribution plan will participate in the existing defined benefit plan.

Required Supplementary Information

Schedule of Money-Weighted Rate of Return on Pension Plan Investments

(Unaudited)

June 30, 2023

Schedule 3

Annual money-weighted rate of return, net of investment expense	
Year Ended June 30, 2023	10.89%
Year Ended June 30, 2022	-14.61%
Year Ended June 30, 2021	28.05%
Year Ended June 30, 2020	4.61%
Year Ended June 30, 2019	5.91%
Year Ended June 30, 2018	8.38%
Year Ended June 30, 2017	12.64%
Year Ended June 30, 2016	0.18%
Year Ended June 30, 2015	3.12%
Year Ended June 30, 2014	17.96%

Required Supplementary Information

(Unaudited)

June 30, 2023

Schedule 4

Schedule of Changes in the Net HISP (Asset) Liability ($ in Thousands)

Year Ended June 30,	2023	2022	2021	2020	2019	2018	2017
Total HISP Liability							
Service cost	$ 7,140	$ 7,599	$ 7,988	$ 7,567	$ 7,909	$ 8,367	$ 8,550
Interest	19,731	20,291	20,782	21,848	22,332	22,240	22,563
Difference between expected and actual experience	(17,590)	(19,466)	(18,835)	(18,882)	(18,780)	(10,599)	(16,757)
Changes of assumptions	4,285	-	-	15,022	-	-	11,073
Benefit payments	(16,842)	(17,254)	(17,699)	(18,171)	(18,556)	(18,840)	(18,999)
Net change in total HISP liability	(3,276)	(8,830)	(7,764)	7,384	(7,095)	1,168	6,430
Total HISP liability - beginning	311,838	320,668	328,432	321,048	328,143	326,975	320,545
Total HISP liability - ending (a)	$ 308,562	$ 311,838	$ 320,668	$ 328,432	$ 321,048	$ 328,143	$ 326,975
Plan Fiduciary Net Position							
Contributions - employer	$ 16,752	$ 16,584	$ 17,676	$ 19,236	$ 18,744	$ 19,080	$ 18,828
Net investment income	31,082	(51,883)	83,022	14,510	18,841	25,502	35,747
Benefit payments	(16,842)	(17,254)	(17,699)	(18,171)	(18,555)	(18,840)	(18,999)
Administrative expense	(187)	(171)	(164)	(183)	(191)	(179)	(184)
Net change in plan fiduciary net position	30,805	(52,724)	82,835	15,392	18,839	25,563	35,392
Plan fiduciary net position - beginning	405,426	458,150	375,315	359,923	341,084	315,521	280,129
Plan fiduciary net position - ending (b)	436,231	405,426	458,150	375,315	359,923	341,084	315,521
Net HISP (asset) liability - ending (a) - (b)	$ (127,669)	$ (93,588)	$ (137,482)	$ (46,883)	$ (38,875)	$ (12,941)	$ 11,454

Schedule of the Net HISP (Asset) Liability ($ in Thousands)

Year Ended June 30,	2023	2022	2021	2020	2019	2018	2017
Total HISP liability	$ 308,562	$ 311,838	$ 320,668	$ 328,432	$ 321,048	$ 328,143	$ 326,975
Plan fiduciary net position	436,231	405,426	458,150	375,315	359,923	341,084	315,521
Net HISP (asset) liability	$ (127,669)	$ (93,588)	$ (137,482)	$ (46,883)	$ (38,875)	$ (12,941)	$ 11,454
Ratio of plan fiduciary net position to total HISP (asset) liability	141.38%	130.01%	142.87%	114.27%	112.11%	103.94%	96.50%
Covered payroll*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Net HISP liability as a percentage of covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Covered Payroll is not meaningful to formulate a ratio of net HISP liability as a percentage of covered payroll. Contributions are only received from employers.

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the information included is for those years for which information is available.

Required Supplementary Information

Schedule of HISP Employer Contributions ($ in Thousands)
(Unaudited)
June 30, 2023
Schedule 5

Year Ended June 30,	2023	2022	2021	2020	2019	2018	2017
Actuarially determined employer contribution	$ 2,690	$ 3,363	$ 6,722	$ 3,654	$ 4,281	$ 5,786	$ 6,087
Actual employer contributions	16,752	16,584	17,676	19,236	18,744	19,080	18,828
Annul contribution (excess)	$ (14,062)	$ (13,221)	$ (10,954)	$ (15,582)	$ (14,463)	$ (13,294)	$ (12,741)
Covered payroll*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Actual contributions as a % of covered payroll*	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Covered Payroll is not meaningful to formulate a ratio of net HISP liability (asset) as a percentage of covered payroll. Contributions are only received from employers.

Notes to Schedule

Valuation date:
Actuarially determined contributions are calculated as of the beginning of the fiscal year in which contributions are reported

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age
Amortization method	Level percentage of payroll, closed
Remaining amortization period	5 years
Asset valuation method	5-year moving average
Inflation	2.50% for 2023, 2022, 2021 and 2020, 2.75% for 2019, 2018 and 2017, 3.00% for 2016 and 2015
Salary increases, including inflation	3.25% to 9.25% for FY23, FY22, FY21 and FY20, 3.75% for 2019, 2018 and 2017, 5.00% for 2016 and 2015, including inflation
Investment rate of return	6.50% for 2023, 2022, 2021 and 2020, 7.00% for 2019, 2018 and 2017, 7.25% for 2016 and 7.50% for 2015, compounded annually, net of investment expense and including inflation
Retirement age	Age 65 for all members hired on or after November 1, 2011, age 62 for members hired prior to November 1, 2011
Mortality	For 2023, 2022 and 2021 - Pub-2010 Below Median, General membership Active/ Retiree Healthy Mortality table with base rates projected to 2030 using Scale MP-2019. Males rates are unadjusted, and female rates are set forward two years.

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the information included is for those years for which information is available.

Required Supplementary Information

Schedule of Money-Weighted Rate of Return on HISP Investments

(Unaudited)

June 30, 2023

Schedule 6

Annual money-weighted rate of return, net of investment expense	
Year Ended June 30, 2023	7.66%
Year Ended June 30, 2022	-11.30%
Year Ended June 30, 2021	22.10%
Year Ended June 30, 2020	4.03%
Year Ended June 30, 2019	5.52%
Year Ended June 30, 2018	8.08%
Year Ended June 30, 2017	12.76%

This schedule is presented to illustrate the requirement to show information for 10 years. However, until a full 10-year trend is compiled, the information included is for those years for which information is available.

Supplementary Information

Schedule of Investment Expenses

Years Ended June 30, 2023 and 2022

Schedule 7

	2023	2022
Investment management fees		
Fixed Income Managers:		
BlackRock Financial Management, Inc.	$ 1,290,629	$ 1,415,920
Hoisington Investment Management	423,202	474,251
Metropolitan West Asset Management, LLC	760,641	546,298
BlackRock Institutional Trust Company, N.A. - TIPS	33,948	36,697
U.S. Equity Managers:		
Barrow, Hanley, Mewhinney & Strauss, Inc.	1,147,103	1,212,148
BlackRock Institutional Trust Company, N.A.	134,898	154,171
DePrince Race & Zollo, Inc.	2,842,092	4,840,293
Newton Investment Management North America, LLC	125,000	62,500
State Street Global Advisors	181,975	226,774
UBS Global Asset Management	266,702	712,158
Westfield Capital Management	313,240	401,713
International Equity Managers:		
Baillie Gifford Overseas Limited	543,002	782,494
BlackRock Institutional Trust Company, N.A.	521,123	590,113
Mondrian Investment Partners, Ltd	2,286,945	2,475,578
Total investment management fees	10,870,500	13,931,109
Investment consultant fees		
Verus Investment Advisory Group	239,814	241,828
Investment custodial fees		
Northern Trust Company	39,885	43,495
Other investment related expenses	279,053	254,747
Total investment expenses	$ 11,429,252	$ 14,471,179

Supplementary Information

Schedule of Administrative Expenses

Year Ended June 30, 2023 and 2022

Schedule 8

	2023	2022
Staff salaries	$ 4,377,167	$ 3,793,160
Social Security	318,490	282,718
Retirement	726,379	631,021
Insurance	677,880	641,164
Total personnel services	6,099,916	5,348,063
Actuarial	170,350	97,850
Audit	206,375	250,511
IT Consulting	187,933	186,570
Legal	15,525	24,841
Total professional services	580,183	559,772
Printing	71,622	58,807
Telephone	27,192	24,758
Postage and mailing expenses	128,396	105,276
Travel	23,203	20,914
Information Technology	563,015	377,640
Total communication	813,428	587,395
Office space	259,736	259,736
Equipment leasing	17,729	15,161
Total rentals	277,465	274,897
Supplies	9,266	8,002
Maintenance	52,686	66,355
Depreciation	59,963	67,304
Other	87,220	99,637
Total miscellaneous	209,135	241,298
Total administrative expenses	7,980,127	7,011,425
Administrative expenses allocated		
Uniform Retirement System for Justices and Judges (URSJJ)	(226,466)	(200,219)
Oklahoma State Employees Deferred Compensation Plan (DCP)	(567,782)	(518,401)
Oklahoma State Employees Deferred Savings Incentive Plan (SIP)	(150,846)	(136,848)
Pathfinder 401(a) Defined Contribution Plan	(322,305)	(232,639)
Pathfinder 457 Defined Contribution Plan	(46,788)	(30,765)
Total administrative expenses allocated	(1,314,187)	(1,118,872)
Net administrative expenses	$ 6,665,940	$ 5,892,553

Note to Schedule of Administrative Expenses

Administrative overhead expenses, including personnel and other supporting services costs, which are paid for by the Plan, are allocated to three other retirement funds also administered by OPERS. The allocation is based on OPERS' estimate of the cost of service provided by the Plan to the other funds.

Supplementary Information

Schedule of Professional/Consultant Fees

Year Ended June 30, 2023 and 2022

Schedule 9

Professional/Consultant	Service	2023	2022
Cavanaugh Macdonald Consulting, Inc.	Actuarial	$ 105,350	$ 97,850
GRS	Actuarial	65,000	-
Eide Bailly LLP	External Auditor	72,600	73,000
Arledge & Associates	External Auditor	35,350	34,500
Finley & Cook, PLLC	Internal Auditor	98,425	143,011
Gartner Inc.	IT Consulting	154,918	150,405
True Digital Security	IT Consulting	33,015	36,165
Ice Miller LLP	Legal	10,733	24,841
Phillips Murrah	Legal	4,792	-
Total professional/consultant fees		$ 580,183	$ 559,772

INVESTMENT

HOW WE WORK

THEN: At the time of our inception, all calculations were done by hand using an adding machine and referencing paper copies of payroll ledgers.

NOW: We receive payroll records digitally and calculate benefits by utilizing spreadsheets with improved ways of calculating service. We have also added a benefit estimator on our website, giving the member quicker access to important numbers essential to planning for retirement.

A LOOK AHEAD: OPERS is currently in the research phase of a new pension management system. The hope is this system will help us provide information to our members instantly and give them personal access to their benefit.

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Investment Consultant's Report

Investment Objectives

The primary financial objective for Oklahoma Public Employees Retirement System (OPERS) is to earn a long-term return sufficient to avoid deterioration in funded status. The System's actuary estimates this return requirement to be 6.5% while its investment consultant estimates the return requirement to be 6.8% for the fiscal year ended June 30, 2023. It is important to note that Verus uses a 10-year investment horizon whereas actuarial consultants use a much longer time horizon in developing forecasts, typically 30 years.

The secondary goals for OPERS are to outperform the asset allocation-weighted benchmark and to rank in the top fortieth percent of a universe of large public pension funds.

Asset Allocation

The System's Investment Philosophy stresses the following key points:

1. Asset allocation is the key determinant of return. Therefore, commitments to asset allocation targets are maintained through a disciplined rebalancing program.
2. Diversification, both by and within asset classes, is the primary tool for risk control.
3. Passive instruments (index funds) are suitable strategies in highly efficient markets.

ASSET CLASS	6/30/23 ALLOCATION	LOW	TARGET	HIGH	% PASSIVE OR SEMI-PASSIVE
U.S. EQUITY	41.8%	40.3%	40.0%	41.8%	77.4%
FIXED INCOME	29.6%	29.6%	32.0%	32.7%	61.4%
INT'L EQUITY	28.2%	26.2%	28.0%	28.5%	66.4%
REAL ESTATE	0.1%	0.1%	0.0%	0.1%	0.0%
CASH	0.3%	0.3%	0.0%	0.3%	0.0%

Review of Fiscal Year 2023 Investment Environment

Market Environment

Risks assets delivered a strong start to 2023, building off the positive momentum seen towards the end of 2022. Year-to-date performance was positive across all major asset classes outside of commodities, as was performance on a one-year basis. Despite the challenging outlook presented in our last letter, economic growth proved to be resilient, despite an ending to the large amount of stimulus introduced in response to the pandemic, and quickly rising interest rates. While earlier in the year many economists had forecast a U.S. recession in mid to late summer (especially after a series of regional bank failures, notably Silicon Valley Bank and First Republic), sentiment eased considerably as the prospect of a "soft-landing" was revived. Falling headline inflation, resilient labor market data, and the first rate pause from the Federal Reserve all contributed to a more positive macroeconomic outlook.

Despite the strong first half of 2023, challenges remain going forward. Within the U.S., inflation is still a concern. The Federal Reserve continues to face difficult policy decisions as inflation, while lower, sits above the two-percent target and economic and labor market strength persists. The FOMC paused rate hikes in June, but markets are pricing in as many as two additional hikes before the end of the current tightening cycle. Overseas, growth in advanced economies remains stunted as many central banks continue their battle against inflation. Within emerging markets, the loudest narrative has centered on China. Reopening after the pandemic provided a material boost to activity, though positive momentum has been overshadowed by mounting geopolitical tension with the United States, a lack of broader accommodative stimulus from Beijing, and a hobbling real estate market.

U.S. Equity

Shares in the U.S. outperformed relative to international developed and emerging market counterparts across both the year-to-date and one-year timeframe. The S&P 500 index rose by an outstanding 19.6% over the trailing one-year period, driven by strength seen in 2023 (16.9% gain year-to-date). Many expected a higher rate environment and slowing domestic consumer to be a ceiling on domestic equity prices, especially following a series of regional bank failures, most notably Silicon Valley Bank and First Republic Bank in March. This ceiling was quickly shattered as the prospect and development of artificial intelligence (AI) technology boosted the already technology-heavy S&P 500 index.

Following concerns over the stability of the broader U.S. financial system, a wave of AI developments fueled a rally in many U.S. technology shares. Some of the largest technology names, which have committed significant investments in research and development over past years, saw the biggest jumps. Notable year-to-date movers include Nvidia (+189.5%), Meta (+138.5%), Apple (+49.3%), and Microsoft (+42.0%).

The significant movement of heavyweight technology names is apparent when looking at size and style factors. Large-cap equities significantly outperformed over the one-year, with the Russell 1000 index gaining 19.4% relative to a 12.3% increase in the Russell 2000 index. Growth handily outperformed value, with the Russell 1000 Growth index rising 27.1% from last year compared to an 11.5% gain from the Russell 1000 Value index.

While U.S. shares have outperformed, the earnings story remains uncertain. Per FactSet, S&P 500 companies are on track for their third straight quarter of year-over-year earnings decline. The expected decline of -7.0% in Q2 2023 reflects a volatile business environment. While earnings expectations are rosier going forward, recent gains seen from U.S. equities are by no means an indicator that the Federal Reserve has successful achieved a “soft-landing” for the economy.

International Equity

International share performance lagged the U.S. Technology-related gains that were primarily captured by large U.S. firms. Despite underperformance, both international developed and emerging market shares saw gains on a one-year horizon. While directionality the same, performance divergence was significant between the two. The MSCI EAFE index increased 18.8% year-over-year, but the MSCI EM index posted a meager 1.7% gain.

International developed shares rebounded in Q4 of 2022, and this momentum carried into 2023, driven by strength from both European and Japanese shares. The STOXX 50, which represents the 50 largest companies in Europe, rose 36.3% from the prior year. While Europe continues to face tighter central bank policies due to high inflation (June 2023 CPI came in at 5.5% year-over-year), resilience was much better than expected, especially in comparison to the negative sentiment following Russia's invasion of Ukraine. Japanese equities also saw strong performance due to a combination of positive economic growth, inflation (Japan has sought higher inflation for many years), and a potential shift in regard to foreign shareholder prioritization. Gains in Japanese equities were mostly achieved in 2023. The TOPIX index increased 25.9% over the year-to-date, making up most of the 31.2% one-year gain.

China dominated the narrative in emerging markets, as emerging market shares initially outperformed on enthusiasm around the country's reopening. This reopening momentum turned out to be short-lived, as negative sentiment quickly overshadowed the move away from an almost three-year "zero-covid" policy. It appears that two primary factors contributed to losses for Chinese shares. The first was a smaller-than-expected reopening wave of economic activity, with no substantial monetary or fiscal stimulus used to accelerate the reopening. This contrasted sharply to the large amounts of stimulus used in the U.S. and Europe. This smaller-than-expected reopening wave provided no reprieve to the already struggling real estate market. The second factor was growing geopolitical tension with the United States. A series of events, including a spy balloon being shot down over U.S. airspace, continued to bolster negative relations between the two global leaders, which likely hurt foreign investor sentiment. The MSCI China index fell -5.5% over the year-to-date, further adding to the -16.8% loss seen over the one-year period.

Fixed Income
Inflation and Federal Reserve action continued to be the dominant driver of fixed income performance over the past year. With the bulk of Federal Reserve rate hikes occurring in the second half of 2022, bonds received the brunt of the pain over the 2022 calendar year (Bloomberg U.S. Aggregate down -13.0%). The Federal Reserve continued to increase rates in response to inflation in 2023, but at a considerably slower pace. The upper bound of the Fed's target rate moved from 4.50% to 5.25% over the 2023 year-to-date period. Smaller hikes were likely in response to strong signs of falling inflation, as headline CPI fell to 3.0% in June of 2023. While the FOMC decided to pause their rate hikes at the June meeting, commentary from Federal Reserve Chairman Powell was very explicit that pausing was not a signal of the end of the tightening cycle. Fed funds futures (an indicator of investor expectations) are pricing in another 25-basis point rate hike at the FOMC's July meeting, as the Federal Reserve will continue to watch the path of inflation, especially when looking at the core basket (4.8% year-over-year rise in June).

Positive performance in 2023 has helped to improve one-year performance for the fixed income complex. Core fixed income (Bloomberg U.S. Aggregate) saw a 2.1% gain over the year-to-date period, bringing the one-year loss to -0.9%. In terms of duration, short maturity U.S. treasuries outperformed, with the Bloomberg U.S. Treasury 1-3 Year index gaining 0.1% over the one-year, compared to -2.1% and -6.8% losses from the U.S. Treasury index and U.S. Treasury Long index, respectively.

Expectations for worsening credit conditions may have reached a peak earlier in the year following the failure of several regional banks, as many investors expected a material pull back

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in credit availability. While high-yield bond and leveraged loan default rates have reached a two-year high per J.P. Morgan, the broader credit spectrum has performed strongly over the one-year period. Emerging market debt in local currency (+11.4%) was the best performer, followed by leveraged loans (+10.1%), high-yield bonds (+9.1%), and hard currency emerging market debt (+7.4%). Credit spreads compressed over the year-to-date, with the average option-adjusted spread for high-yield and investment grade bonds sitting at 390 basis points and 123 basis points, respectively. It has been surprising to see credit spread remain at low levels, despite recent rises in bond default activity, and expectations that defaults will continue to rise into 2024.

Commodities

In 2022, there was two major stories in the commodities space. First, the rapid increase in energy and grain prices—much of this due to Russia's invasion of Ukraine—was an igniting factor for global inflation issues. The second story was commodity performance. Commodities were one of the few asset classes to post a positive return during the 2022 calendar year, and the asset dominated the narrative in 2022 with some market participants calling for a new booming commodity cycle. However, commodities ended up playing a much smaller role in 2023, as a combination of easing supply pressures and lower demand hurt price performance. The Bloomberg Commodity index fell -7.8% over the year-to-date, driving the -9.6% one-year loss.

Currency

The strong dollar theme which prevailed in the first three quarters of 2022 quickly reversed course in the fourth quarter of 2022. The dollar has broadly weakened in 2023, but movements have been relatively small. Interest rates have played a material role. As inflation in the U.S. seems to be under control, this has led to lower rate expectations relative to other major currencies such as the Euro and the British Pound. During this period, the Japanese Yen saw a small surge on speculation of changing rate policy under new Bank of Japan Governor Kazuo Ueda. However, this speculation proved to be only speculation, as the Yen weakened 8.7% against the dollar over the year-to-date. The Bloomberg Dollar index, a gauge of the U.S. dollar relative to major pairs, saw moderate losses, down -2.2% in comparison to one year ago.

Outlook

The first half of 2023 has been a strong period for most risk assets, especially across the equity and credit spectrum. Despite this strength, investor views of the future have diverged regarding whether the economy has achieved a new equilibrium ("soft landing"), or whether a material recession is imminent. Domestic investor sentiment remains positive as inflation has shown signs of easing, real earnings growth has moved back into positive territory, and the labor market remains resilient despite the quick rise in interest rates. While strong asset performance has further boosted sentiment, risks including regional banks, commercial office real estate, and sticker inflation remain. It is important to remember that rising interest rates tend to impact the economy *with a lag*. We believe many effects of interest rate rises have yet to be felt, and that the economy and markets may feel some pain by early 2024. Across international developed markets, we believe growth will continue to face headwinds until inflation is under control, but for the moment, these markets have shown greater resilience than expected. Lastly, emerging markets are set to grow faster than advanced economy counterparts, but China may continue to overshadow the narrative, especially as the U.S. China relationship remains tenuous.

Portfolio Review

The Board maintained its existing strategic asset allocation in fiscal year 2023 as well as its portfolio structure and manager line up.

Performance Review

At quarterly intervals, the System reviews performance at the total fund, asset class and individual manager levels. At each level, returns are evaluated versus appropriate indexes and peers. Index comparisons have as return objectives various after-fee return premiums with risk (standard deviation) not exceeding 125%-150% of the underlying index. OPERS targets returns within the top fortieth percentile of peer comparisons over longer time periods.

Investment returns achieved through June 30, 2023, have been calculated using a time-weighted rate of return methodology based upon market values. As shown in the following table, the U.S. Equity asset class outperformed its benchmark on a relative basis for all time periods. Performance was also above median for the US equity composite led by significant outperformance in the small cap value managers. All active managers except one did better than the median peer group manager for the fiscal year. The Non-U.S. Equity asset class outperformed the index by 20 bps but underperformed relative to peers. Longer-term annualized time period returns were in line with the benchmark. Non-U.S. Equity ranked as slightly below median versus the peer group for most time periods, which is partially driven by a sizeable passive allocation that is extremely cost effective but tends to lag active international equity returns. The Fixed Income asset class outperformed the benchmark losing -1.0% versus -1.8% for the benchmark but ranked towards the bottom of its peers. The longer duration strategy was a detractor on a relative basis.

The total OPERS Plan performed well above its Policy Benchmark on a relative basis for the 1-year period and at or above the benchmark for annualized time periods ended June 30, 2023. The total OPERS Plan ranked in the top 2nd percentile of the peer universe of Public Funds greater than $1 Billion for all periods, driven by its asset allocation, which is heavier in public markets equity and specifically, having a significant allocation to US equity markets which outperformed international equity and fixed income during the fiscal year.

PERIODS ENDED 6/30/23	ONE YEAR	THREE YEARS	FIVE YEARS
Domestic Equity	19.0%	14.7%	11.1%
85% Russell 1000 / 15% Russell 2000	18.4%	13.7%	10.8%
Rank*	35	23	43
Non-U.S. Equity	13.5%	7.2%	4.0%
MSCI ACWI ex-U.S.	13.3%	7.7%	4.0%
Rank*	70	75	70

PERIODS ENDED 6/30/23	ONE YEAR	THREE YEARS	FIVE YEARS
Fixed Income	-1.0%	-4.1%	1.3%
78% BC Agg./11% Citi 20+ Year Tsy./11% BC U.S. TIPS	-1.8%	-4.5%	1.8%
Rank*	86	73	66
Total Fund	10.9%	6.7%	6.2%
*Policy Benchmark***	10.5%	6.2%	6.0%
Rank*	2	94	67

* Ranking 1 is best, 100 is worst. Rankings source is Investment Metrics (formerly called InvestorForce).

** Policy Benchmark is:
40% Custom Domestic Equity Benchmark (85% Russell 1000/ 15% Russell 2000)/
32% Custom Fixed Income Benchmark (78% BB U.S. Aggregate/ 11% Citi 20-Year+ Treasury/ 11% BC U.S. TIPS)/28% MSCI ACWI ex-U.S. Index

Verus continues to believe that OPERS is managed in a prudent and cost-effective manner. We believe that the sound and disciplined policies that have been implemented by OPERS for decades will continue to enable to Plan to meet its investment objectives over the long term.

Yours truly,

Joseph Abdou	Mike Patalsky
Consultant	Managing Director

Verus

Chief Investment Officer's Report

Oklahoma Public Employees Retirement System
P.O. Box 53007
Oklahoma City, Oklahoma 73152-3007

800.733.9008 toll-free
405.848.5946 fax

Dear Members:

The Fund's total return for the current fiscal year rebounded after the tumult experienced in the prior fiscal year. The Fund gained 10.96% (gross of fees) for fiscal year 2023, compared to a loss of 14.55% for the prior fiscal year. This result was well above the 6.5% long-term actuarial return target. The Fund's return for fiscal year 2023 not only compared favorably to the long-term assumed rate of return (6.5%) and peer Systems nationwide, but also outperformed the Policy Portfolio benchmark return of 10.50% for the period. For the fiscal year, equity markets, both domestically and outside of the U.S., rebounded dramatically over the prior fiscal year. Investor sentiment became steadily more optimistic that the Federal Reserve could orchestrate a "soft landing" for the U.S. economy. Equity markets in the U.S. shrugged-off historic actions by the Federal Reserve regarding the frequency and level of interest rate movements and led surging global equity markets upward. The negative total return of the U.S. bond market reflected the aggressive Federal Reserve actions to fight inflationary pressure since the early 1980s. Stock markets outside the U.S. likewise rallied during the period, at least partially reflecting optimism that the world's largest economy would not sink into a recession.

We endeavor to build a durable portfolio that will weather tumultuous market conditions and capture market gains during advantageous markets. Maintaining diversification among asset classes and geographical regions is a critical component of that effort. We also de-emphasize active management in the portfolio, as demonstrated by our large holdings of passive index funds. This year's letter, which covers the 2023 fiscal year, will follow the same format as in years past. First, I will discuss the general economic environment and the performance of various markets throughout the fiscal year. Next, I will focus on the Fund by reviewing the investment performance and the asset allocation. Then, I will offer an investment outlook and discuss recent events at the Fund. Finally, I will review the Fund's investment philosophy and guiding principles because both are critically important to the investment decision-making process.

<u>Economic Environment</u>

Gross Domestic Product (GDP), the primary gauge for economic activity in the U.S., increased at an annual rate of 2.1% for the second quarter of 2023 (per the third revision as of the date of this report). This increase in overall economic activity followed the first quarter 2023 increase of 2.2% on an annualized basis. The increase in GDP growth for the second quarter of 2023 was driven by an increase in business investment, consumer spending, and government spending. These results, while below the long-term GDP growth rate average for the U.S. economy, indicated that so far, the Federal Reserve had been successful in reducing inflationary pressure while not depressing economic activity to the point of leading the economy into a recession. The labor market in the U.S. remained robust, as the unemployment rate remained steady at 3.6% for June 2023, where it has effectively been range-bound since January of 2022. Inflationary pressure continued to decline throughout the fiscal year, having started the fiscal year at a rolling annual rate above 8% and ending the fiscal year at a rolling annual rate of just 3%. The Federal Reserve raised rates aggressively during the fiscal year in an effort to slow down spiking inflation. The strength the U.S. dollar had experienced over the prior fiscal year waned, and it weakened relative to the basket of non-U.S. developed market currencies. Note that a weaker dollar makes U.S. exports less expensive to other countries and positively impacts U.S. dollar-based investor returns in foreign markets. Corporations who derive revenues from non-U.S. markets also receive a tailwind from a weakening dollar when converting revenues back into U.S. dollars.

Chief Investment Officer's Report (continued)

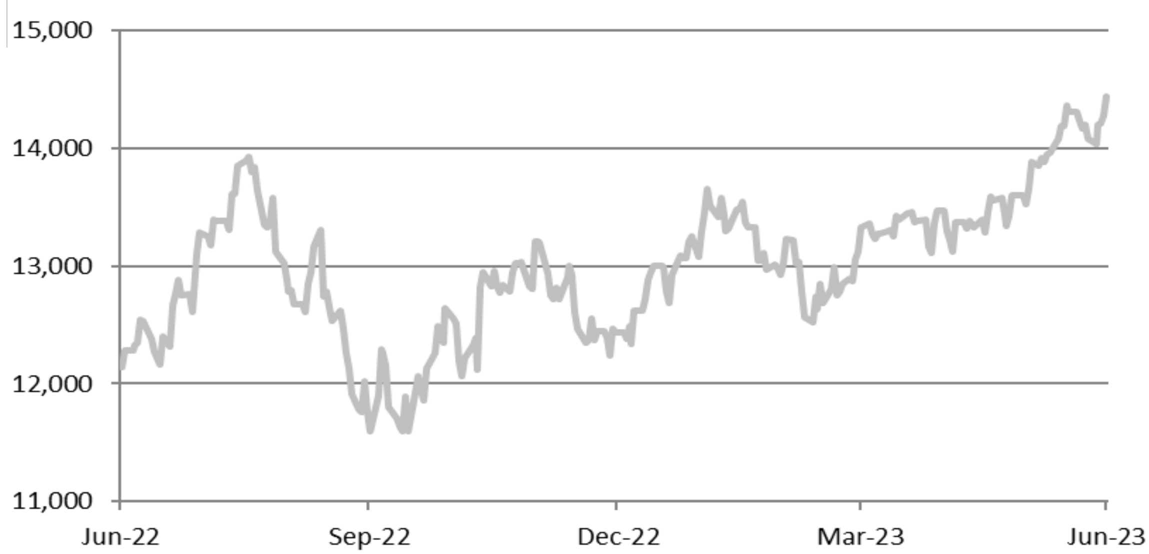
The theme in the U.S. of slower (but still positive) economic growth also applied to much of the rest of the world. The International Monetary Fund (IMF) downgraded the prospects for global economic growth, but particularly in the world's developed economies. The IMF predicted global growth to fall to 3% for each of the next two years. As in the U.S., central banks around the globe have been aggressive in tightening actions to stem runaway inflation and that has constrained economic activity globally. The IMF has predicted a pronounced slowdown for global developed economies, which it expects to grow by 1.3% for 2023, versus 2.7% in 2022. For the second quarter of 2023, the Euro Area's largest economy, Germany, stalled; but modest growth was experienced by France and Spain. Concerns that economic activity in the European Union may fall to recessionary levels persist. In the U.K., economic growth was modestly positive in the second quarter of 2023, following aggressive monetary tightening activity by the Bank of England. China announced measures to boost domestic consumption as well, to stimulate domestic economic activity. The theme of aggressive monetary tightening to suppress high inflation and constrained economic activity was evident across the world.

U.S. and Global Stock Markets

The U.S. stock market, as measured by the Russell 3000 Index, rallied decisively during the fiscal year. The Russell 3000 Index is one of the broadest domestic equity indices available and a good proxy for the U.S. equity market as a whole. The equity markets in the U.S. shrugged off initial concerns about extremely hawkish Federal Reserve actions and a banking crisis that had spread across U.S. boarders. Investors increasingly became confident that the U.S. economy would not tumble into a recession, and risk-taking in equity markets was highly rewarded.

Change in the Russell 3000 Index during the fiscal year ended June 30, 2023

Value at 6/30/23	14,445.7
Value at 6/30/22	12,143.9



Source: FTSE Russell

The Russell 3000 showed astounding resiliency for the one-year period through June 30, 2023-- it rose by 18.95% as a result of investor optimism that the Federal Reserve had indeed managed to orchestrate a "soft landing" for the U.S. economy. Not even the threat of a banking crisis for small-to-mid sized banks in the U.S. (which had spread to some larger international banks) and continued geopolitical concerns could slow the market's advance.

Chief Investment Officer's Report (continued)

Within the Russell 1000 index (which represents domestic large capitalization stocks), the market rally was led by the Technology, Industrials, and Consumer Discretionary sectors, returning 38.7%, 27.5%, and 24.5% for the period, respectively. These sectors tend to be cyclically oriented and respond well to an optimistic general economic outlook by market participants. Investors continued to gravitate towards large capitalization stocks during the period, as the small capitalization index, as represented by the Russell 2000 index, gained 12.3% for the one-year period ending June 30. Equity style leadership (i.e., market capitalization size, growth, value) favored large capitalization and heavily favored growth-oriented stocks during the fiscal year. The growth index handily outperformed the value index in both large capitalization and small capitalization space. Assuming risk in the larger-cap areas of the markets associated with growing companies sensitive to improving economic conditions proved a winning combination in the U.S. for the period.

The rest of the developed world continued to underperform the U.S. equity market on a U.S. dollar basis. The MSCI All Country World Index ex-U.S. (ACWI ex-U.S. Index net), which includes public equities from both developed and emerging markets, gained 12.7% in U.S. dollar terms for the fiscal year. In a reversal from the last fiscal year, the U.S. dollar weakened modestly relative to many other foreign currencies, which contributed a slightly positive compounding effect to equity market gains experienced by U.S. dollar investors in foreign markets. Returns in U.S. dollars for the period in countries classified as developed non-U.S. markets were comparable to returns experienced in the broad U.S. equity markets. However, emerging market returns in U.S. dollar terms performed much worse than non-U.S. developed markets, gaining just 1.75% for the period. The stock market in China continued its decline, losing 16.7% in U.S. dollar terms, as investors faced more uncertainty that the economy there would fall into recession due to the continued real estate crisis and tepid consumer spending. The Chinese government announced measures to stimulate the economy, specifically targeting the automobile, real estate, electronic products, and services industries. For the first time in many years, the returns investors experienced for assuming equity risk in non-U.S. equity markets was comparable to U.S. markets and the currency effect on U.S. dollar returns was not a headwind for the period.

Interest Rates

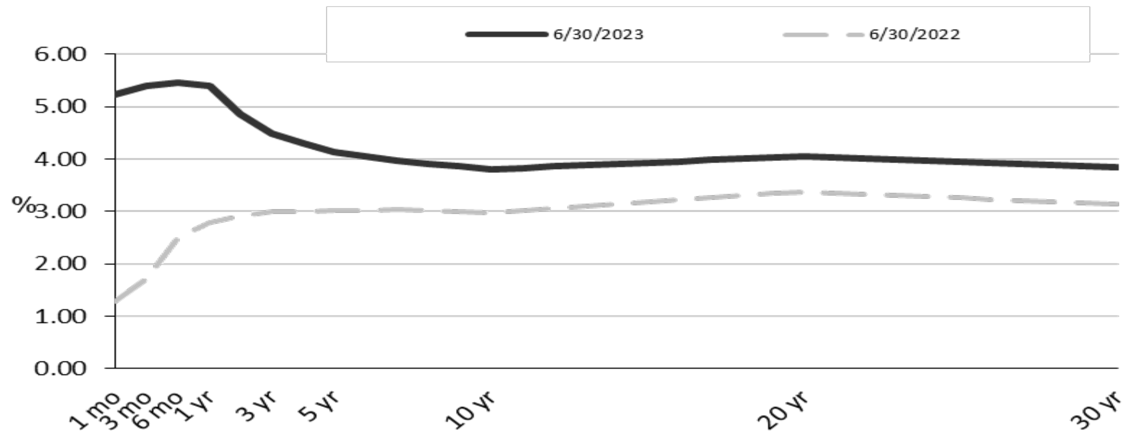
The chart below depicts the U.S. Treasury term structure of interest rates. The yield curve is a graphical representation of yield levels across the spectrum of bond maturities. As shown, yields continued to rise dramatically across the entire curve over the course of the fiscal year, but especially in the short end of the curve. The Federal Funds Rate began the fiscal year at a range of 1.50%-1.75% and ended the fiscal year at a range of 5.00%-5.25%. The Federal Reserve aggressively raised rates seven times during this period to combat red-hot inflationary pressure facing the U.S. economy. The yield curve itself was inverted at the end of the fiscal year, meaning short-term rates were higher than long-term rates. The inversion of the yield curve demonstrated bond investor concerns that that Federal Reserve's aggressive actions could plunge the economy into a recession—although that historical relationship is tentative at best. During the fiscal year, Federal Reserve Chair Jerome Powell consistently stressed the necessity for the U.S. Federal Reserve's hawkish tightening policy to control inflation in appreciation of the robust economy and strong labor market. The Federal Reserve's June meeting was the only meeting during the fiscal year that did not result in a rate hike. Despite this pause, which allowed the Federal Open Market Committee (FOMC) to assess the impact of previous rate hikes, Chairman Powell reiterated the Fed's commitment to maintaining the current monetary policy designed to move inflation closer to the 2% strategic target. The Federal Reserve raised rates by 75 basis points in July, September, and November, 50 basis points in December, and 25 basis points in February, March and May. The Fed's aggressive actions taken during the fiscal year had a noticeable impact on inflation. Core CPI, the preferred measure of inflation by the Federal Reserve, fell to an annual rate of 4.8% at the end of the fiscal year, having started at an annual rate of almost 6%. The overall inflation rate, which includes more volatile food and energy prices paid by consumers, declined to an annual rate of 3.0% over the year ending June 30, 2023. It appears the Federal Reserve had orchestrated a balancing act with its aggressive moves: containing spiraling inflationary pressures at the risk of curtailing economic activity.

In the Eurozone, the European Central Bank (ECB) raised rates eight times during the fiscal year. This increase of 4 percentage points mirrored actions taken in the U.S. The ECB also revised expectations for inflation, which it expects to stay above its 2% target through 2025. The Bank of England likewise aggressively moved to raise rates, as core inflation there reached a 31-year high. The theme of aggressive actions by central banks in developed nations to cool inflationary pressure was evident during the fiscal year. However, as of the writing of this report, the Eurozone entered this period of high

Chief Investment Officer's Report (continued)

inflation in a relatively weaker economic condition and appears to have paid a relatively higher price for their efforts in the form of reduced economic activity.

U.S. Treasury Yield Curve



Source: U.S. Treasury

Investment Returns Through June 30, 2023

U.S. Equity	Style	1 Year	3 Years	5 Years
Russell 3000	Broad U.S. Equity	18.95%	13.89%	11.39%
S&P 500	Large Cap Equity	19.59%	14.60%	12.31%
Russell 1000	Large Cap Equity	19.36%	14.09%	11.92%
Russell 1000 Growth	Large Cap Growth	27.11%	13.73%	15.14%
Russell 1000 Value	Large Cap Value	11.54%	14.30%	8.11%
Russell 2000	Small Cap Equity	12.31%	10.82%	4.21%
Russell 2000 Growth	Small Cap Growth	18.53%	6.10%	4.22%
Russell 2000 Value	Small Cap Value	6.01%	15.43%	3.54%
Oklahoma Public Employees Retirement System	**Broad U.S. Equity**	**18.97%**	**14.71%**	**11.09%**

U.S. Fixed Income	Style	1 Year	3 Years	5 Years
ML 3-Month T-Bill	Cash	3.72%	1.31%	1.53%
Bloomberg Barclays U.S. Aggregate	Core Bonds	-0.94%	-3.96%	0.77%
Citigroup 20-year Treasury Average	Long Term Bonds	-8.44%	-12.67%	-1.20%
Bloomberg Barclays Corporate High Yield	High Yield Bonds	9.06%	3.13%	3.36%
Oklahoma Public Employees Retirement System	**Domestic Fixed Income**	**-1.01%**	**-4.09%**	**1.35%**

International Equity	Style	1 Year	3 Years	5 Years
MSCI ACWI Ex-US (net)	Broad Non-US Equity	12.72%	7.22%	3.52%
MSCI EAFE (net)	Developed Non-US Equity	18.77%	8.93%	4.39%
MSCI Emerging Market (net)	Emerging Non-US Equity	1.75%	2.32%	0.93%
Oklahoma Public Employees Retirement System	**Non-U.S. Equity**	**13.46%**	**7.17%**	**3.97%**

Oklahoma Public Employees Retirement System	**Total Fund**	**10.96%**	**6.66%**	**6.17%**

Source: Various index providers, including FTSE Russell, S&P, Bloomberg Barclays, FTSE, and MSCI. OPERS returns were calculated using the BAI Iterative method (as such returns are time-weighted) and are gross of investment fees. International Equity Indices shown are net.

Chief Investment Officer's Report (continued)

Investment Performance

Investor sentiment drove markets higher

Largely driven by the strength of the global equity markets for the fiscal year, the Fund produced a nominal total return of 10.96% for the period gross of fees (10.82% net of fees). The Fund outperformed the policy benchmark portfolio by 45 basis points (gross of fees) overall for the period. As shown by the table above, the performance of the U.S. and non-U.S. equity market segments was the driver of the impressive results. The Fund benefited from very strong U.S. equity market returns, producing portfolio gains of nearly 19% in that segment of the Fund. The non-U.S. equity segment of the Fund was also a positive contributor to overall returns for the year. Lastly, the bond portfolio negatively contributed to the total return of the Fund, due to the continuation of hawkish Federal Reserve tightening actions that caused interest rates to rise dramatically, and bond total returns to fall, over the period.

The Fund outperformed the Policy portfolio for the fiscal year by 45 basis points, which is an impressive result. The Fund's asset allocation positioning was neutral to, or a modest detractor from, nominal performance for the period, as the Fund entered the fiscal year overweight U.S. equities (positive contributor) but underweight non-U.S. equities and overweight fixed income (negative contributors) relative to the Policy portfolio. The primary driver of the favorable performance relative to the Policy portfolio was the Fund's exposure to active management, especially in the fixed income and the U.S. equity classes. This actively managed exposure proved highly beneficial and was able to compensate for the modestly adverse portfolio positioning going into the fiscal year and unfavorable results from active management in other asset classes.

U.S. Equity

The Fund continues to use a mix of passive and active investment management within the domestic equity portfolio structure, with a high proportion of U.S. equity assets managed in a passive style. Equity markets in the U.S. were resilient and rebounded strikingly after the sell-off experienced in the prior fiscal year. In aggregate, the domestic equity portfolio produced a total return of almost 19% for the fiscal year. Not every advisor that OPERS employs to make active stock selection decisions in the U.S. equity portion of the portfolio delivered excess returns relative to each advisor's respective benchmark. But the advisors that outperformed their indices delivered excess returns of sufficient magnitude to carry the day. The advisors who picked stocks associated with the small capitalization and value-oriented areas of the market produced remarkable excess returns for the portfolio. While this combination of exposures (small capitalization and value) was the worst performing of all U.S. equity index market segments, the excess returns generated by two managers more than compensated for the active return results derived from the rest of the U.S. equity portion of the portfolio, including the managers who focus on large capitalization stocks and growth-oriented stocks. As a group, the small capitalization portion of the portfolio delivered a return of over 17.3% for the fiscal year, which compares favorably to the small capitalization index return of 12.3% for the period. Overall, active management results were a profoundly positive contributor to overall Fund performance, but those results were concentrated in a very limited number of advisors in the U.S. equity segment of the portfolio.

Non-U.S. Equity

The non-U.S. equity segment was a strong positive contributor to the overall fund on a nominal basis, having gained 13.46% in U.S. dollar terms for the period. The U.S. dollar weakened relative to many other foreign currencies, which contributed positively to returns experienced by U.S. dollar investors in foreign markets. Much like the U.S. equity portfolio, a high proportion of these Fund assets are managed in a passive style. Within the non-U.S. equity segment of the asset allocation, two active managers are used. One of the active managers emphasizes the value area of the international equity market, and the other manager emphasizes the growth area. Like the experience in the U.S. equity markets, stock picking by one non-U.S. manager contributed positively to benchmark-relative returns. The manager focusing on the international value area of the equity markets modestly underperformed its benchmark, although the benchmark itself was up over 13% in U.S. dollar terms for the period. The advisor who emphasizes the growth style considerably outperformed its benchmark, producing excess returns of 2.68% relative to its benchmark. This strong outperformance of the advisor who emphasizes growth-oriented stocks propelled this portion of the portfolio to outperform the Policy benchmark for the fiscal year.

Chief Investment Officer's Report (continued)

Fixed Income
For the two past fiscal years, the Fund's fixed income portfolio contributed negatively to overall total returns for the period (and nominal returns were just above zero for the one year before that). For the current fiscal year, the bond portfolio lost 1.01% at the asset class level. The total return of the asset class was negatively impacted by steadily rising interest rates across the yield curve. From a contribution to total return perspective, the worst performance was again associated with the manager who emphasizes long-duration U.S. Treasury securities. This manager lost more than 7% for the period as long-term rates rose by approximately 70 basis points across the longer end of the maturity spectrum (15 years and above). The managers who emphasize the broader areas of the bond market delivered comparatively more favorable results. Bonds are maintained in the portfolio for their volatility-dampening effect when combined with exposure to the equity markets. The total return of the bond market in general reflected the aggressive tightening activities of the Federal Reserve during the fiscal year, which constrained returns for the fiscal year. However, active management (bond picking and duration positioning) experienced quite favorable excess return results for the Fund, which propelled this portion of the portfolio to outperform the Policy benchmark for the period.

Asset Allocation

Diversification Reduces Volatility
Diversification is the most effective defense against the risks associated with any one individual security or asset class. Risks are controlled by allocating the Fund's assets across various asset classes and sectors within asset classes. There were no changes to the Policy asset allocation during the fiscal year.

Asset Class	Min	6/30/2023	Target	Max
Cash and Real Estate	0.0%	0.4%	0.0%	0.0%
Domestic Fixed Income	27.5%	29.6%	32.0%	36.5%
U.S. Equity	34.4%	41.8%	40.0%	45.6%
Non-U.S. Equity	25.0%	28.2%	28.0%	31.0%
Total Fund		**100%**	**100%**	

May not equal 100% due to rounding

Outlook and Recent Events

Outlook
If you've read this report in previous years, you know that I begin this section on a cautionary note regarding the accuracy of forecasted market returns. Correctly and consistently forecasting the market's behavior is impossible and taking any forecast as fact is sheer folly. We build the Fund according to the tenets set forth in our Investment Policy while making diversification a priority with respect to different asset classes and within each asset class. We endeavor to structure the Fund so it may benefit from strong returns in relatively riskier asset classes but are ever mindful to maintain a level of diversification to dampen the return volatility that can result during more volatile periods.

The outlook for the global economic environment is still uncertain but has increasingly appeared to favor a "best case scenario" going forward where the actions of the global central banks to turn the inflationary tide has not, so far, resulted in strong recessionary pressures. As a result, slower economic growth has been forecasted for most nations around the world. Those pressures are magnified by continued geopolitical risks, which could more markedly impact an already fragile global economy. The durability of consumers continues to be tested across the globe. The balancing act that central banks around the world have faced is taking action that will be aggressive enough to curtail inflationary pressures, but not aggressive enough to induce recessions in their respective economies. Last year, I said I believed the ability of central banks across the world to exhibit meaningful progress towards taming inflation is the key driver of the short-term economic outlook. This year, I believe the work by central banks has largely been done. Absent an unanticipated spike in inflation, I expect the Federal Reserve to curb its hawkish policy. Central banks around the globe are playing a bit more catch-up, but I

Chief Investment Officer's Report (continued)

believe we are late in the 9th inning of this game. My concerns regarding geopolitical risks remain, as expectations for global economic growth was weakened by central bank actions (by design) and capital markets volatility could increase—both of which imply there is not much room for error (to continue the baseball analogy).

My biggest area of focus continues to be the prospect of generating and maintaining long-term investment results that match or exceed the actuarial assumed rate of return of 6.5%. Returns to a diversified portfolio are ultimately a function of the performance of the markets in which that portfolio is invested. Interest rates have continued to rise dramatically as the Federal Reserve attempts to control inflation, which is a positive sign for diversified investors going forward. Equity market returns remain the driver of the overall return of the Fund, and risks remain in the form of slowing economic growth and geopolitical risks, among others. With rates now at more reasonable levels, the returns to fixed income are poised to contribute more positively to portfolio-level total returns going forward—or at least not be as much of a drag as the asset class has been in the past several years.

Fixed Income

Over a long period of time, the total return of the bond market ***tends*** to resemble the yield of years past. Over short periods, interest rate movements may have a profound impact on the capital gains (or losses) experienced by bond investors. Given the dramatic increase in U.S. Treasury yields (sell-off of bonds) that started in 2021 and continued, indeed accelerated during the current fiscal year, the total return of the bond market was negative for the second year in a row. The capital losses incurred from a quickly rising rate environment overpowered the yield earned on fixed income investments during the year, again leading to negative total returns for the asset class. However, the Federal Reserve paused the tightening activity at the June 2023 meeting to gauge the longer-term impact of past actions to raise rates on the economy. Indications from the Federal Reserve are that additional rate increases are likely necessary but are also expected to be less than what had been experienced during the fiscal year. This dramatic increase in the general level of interest rates may be a harbinger of better long-term total returns for fixed income investors going forward. At the very least, the asset class may not be as much of a drag on total returns at the portfolio level as it has been for the past few years. Nevertheless, bonds remain an important and vital part of a diversified investment portfolio.

Equity

Equity markets are impossible to predict with any type of precision. Over short periods of time, market sentiment and technical factors (buying and selling) have an overwhelming impact on returns experienced by investors. ***Over a long period of time***, the real return from the equity markets can be attributable to three main sources: dividends on stocks, the growth rate of corporate earnings, and changes in the valuation ratios. Generally, the growth rate of earnings depends on the economic environment. The outlook for the global economy has dimmed, given the actions of central banks to tame high inflationary pressures facing the world. Corporate earnings continue to be surprisingly strong but inflationary forces and slowing economies could pressure corporate earnings going forward. Market volatility continues to remain high and is likely to stay elevated over the foreseeable future as investors struggle with uncertainty caused by geopolitical risks (and the impacts on specific economic sectors) and a higher general level of interest rates. The optimism that central bank activity would not lead to a deep recession steered the markets up for this fiscal year. The market's resilience to the gloom reported for the prior fiscal year proved that maintaining the portfolio's strategic asset allocation, and capturing the returns from strong equity markets, provides the optimal opportunity to deliver the investment returns necessary to meet the long-term objectives of the Fund.

Recent Events

There were no changes to the Fund's strategic asset location or managers that comprise the Fund during the fiscal year. Last year, I said that maintaining the strategic asset allocation is of great importance in achieving the Fund's long-term objectives. I am happy to report that the discipline in maintaining our strategic asset allocation paid off handsomely, given the strength of the equity markets for this fiscal year. The Fund performed very well, not only from a nominal return perspective, but was also one of the best performing relative to our peer group nationwide. The strategic asset allocation is the primary driver of investment results, and in this fiscal year, results were impressive.

Chief Investment Officer's Report (continued)

Investment Philosophy and Guiding Principles

The investment philosophy and the principles that guide the stewardship of the Fund have remained consistent and are listed below. A pension fund has the longest of investment horizons and, therefore, rightly focuses on factors impacting long-term results:

- Asset allocation is the key factor determining long-term results.
- Disciplined rebalancing toward the desired asset allocation maintains diversification and controls risk.
- Diversification within and across asset classes is the most effective tool for controlling risk.
- Passive investment management is commonly the most effective approach in efficient markets; active investment management can succeed in less efficient markets.

For a complete discussion of the investment portfolio and policies thereof, please see the Statement of Investment Policy. A copy of the policy is posted on the OPERS website, www.OPERS.OK.gov/Investments. If you have any questions about this report or the management of the Fund's investments, please contact me. Thank you.

Regards,

Brad Tillberg, CFA
Chief Investment Officer

Largest Holdings

The Plan's ten largest fixed income and stock holdings at June 30, 2023, are described in the following schedules. The Plan invests in various index and commingled funds which are separately presented.

Ten Largest Fixed Income Holdings (By Fair Value):

Security	Par	Fair Value
U.S. Treasury notes 4.625% due 06-30-2025	127,600,000	$ 127,016,828
U.S. Treasury notes 4.0% due 06-30-2028	103,295,000	102,730,105
FNMA Single Family Mortgage 0% 30 Years Settles July	110,648,079	102,358,356
U.S. Treasury bonds 4.125% due 06-15-2026 REG	66,202,000	65,534,808
U.S. Treasury bonds 2.5% due 05-15-2046 REG	80,560,000	61,946,234
U.S. Treasury notes 1.375% due 08-15-2050	100,555,000	58,427,954
U.S. Treasury bonds 2.50% due 02-15-2046 REG	72,410,000	55,735,900
U.S. Treasury notes 3.625% 05-31-2028	55,883,000	54,660,559
U.S. Treasury bonds 3.0% 11-15-2045	54,450,000	45,918,791
U.S. Treasury notes 2.75% due 07-31-2027	47,345,000	44,635,609

Ten Largest Stock Holdings (By Fair Value):

Security	Shares	Fair Value
Apple Inc.Common Stock	655,922	$ 127,229,190
Microsoft Corporation Common Stock	314,911	107,239,792
Alphabet Inc. Common Stock	659,692	79,222,359
Amazon.com, Inc. Common Stock	390,980	50,968,153
Nvidia Corp Com	107,738	45,575,329
Meta Platforms Inc	140,237	40,245,214
United Health Group Inc Com	72,968	35,071,340
Visa Inc. Common Stock	133,511	31,706,192
Taiwan Semiconductor Manufacturing Common Stock	298,022	30,076,380
Tesla Inc Com	90,470	23,682,332

Investments in Funds (By Fair Value):

Fund	Units	Fair Value
BlackRock Russell 1000 Index Fund	5,375,806	$ 1,955,594,630
BlackRock ACWI ex-U.S. Index Fund	53,247,187	1,776,285,529
BlackRock U.S. TIPS Index Fund	15,922,014	399,053,729
BlackRock ACWI ex-U.S. Growth Index Fund	16,339,485	351,002,545
BlackRock Russell 1000 Value Index Fund	1,695,244	323,737,263

A complete list of portfolio holdings is available upon request from the OPERS Investment Accounting and Financial Reporting Department.

Investment Portfolio by Type and Manager

At June 30, 2023, the investment portfolio of OPERS was allocated by type and style as follows:

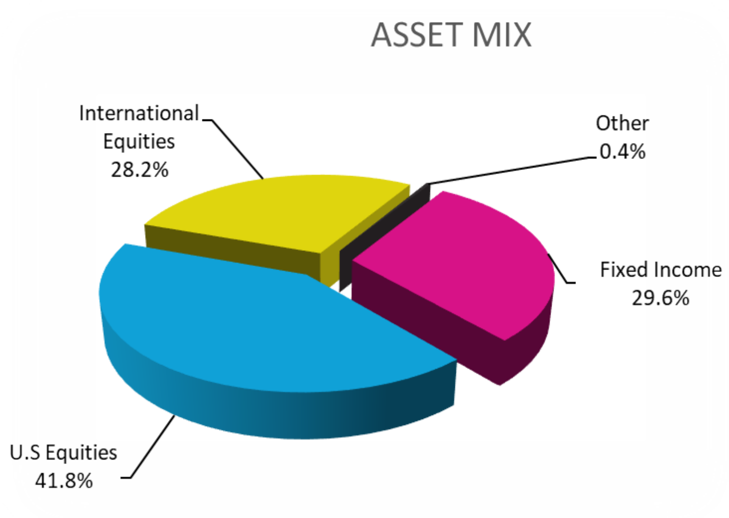
Investment Type and Manager	Style	Fair Value*	Percent of Total Fair Value
		(000's)	
Fixed Income:			
Blackrock Financial Management, Inc.	Constrained Core	$ 1,630,162	14.4%
Hoisington Investment Management	Interest Rate Anticipation	281,855	2.5%
BlackRock Institutional Trust Company	Index Fund – U.S. TIPS	399,060	3.5%
Metropolitan West Asset Management	Core Plus	1,221,455	10.8%
Total Fixed Income		3,532,532	31.2%
U.S. Equities:			
BlackRock Institutional Trust Company	Index Fund – Russell 1000 and Value	2,279,332	20.0%
Newton Capital Management	Large cap – Enhanced Index	660,717	5.8%
State Street Global Advisors	Large cap – Enhanced Index	663,078	5.8%
Westfield Capital Management	Large cap – Growth	386,743	3.4%
UBS Global Asset Management	Small cap – Growth	197,873	1.7%
Barrow, Hanley, Mewhinney & Strauss, Inc.	Small cap – Value	235,406	2.1%
DePrince, Race & Zollo, Inc.	Small cap – Value	228,251	2.0%
Total U.S. Equities		4,651,400	40.8%
International Equities:			
Baillie Gifford Overseas Ltd.	International Growth	305,196	2.7%
Mondrian Investment Partners, Ltd.	International Value	696,162	6.1%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S. Growth	351,004	3.1%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S.	1,776,289	15.6%
Total International Equities		3,128,651	27.5%
Short-term Investment Funds	Operating Cash	37,630	0.3%
Total Managed Investments		11,350,213	99.8%
Real Estate		9,650	
Securities Lending Collateral		348,119	
Cash Equivalents on Deposit with State		7,196	
Total Investments and Cash Equivalents		$ 11,715,178	
Statement of Fiduciary Net Position			
Cash Equivalents		120,763	
Investments		11,594,415	
Total Investments and Cash Equivalents		$ 11,715,178	

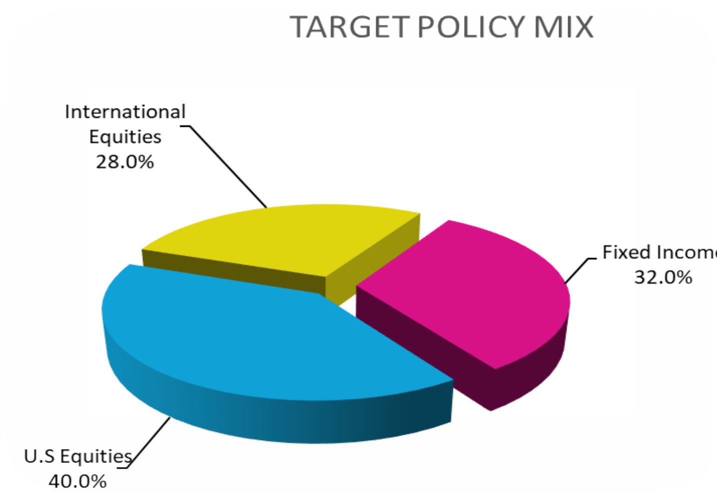
* *Manager fair values include their respective cash and cash equivalents.*

Asset Comparison

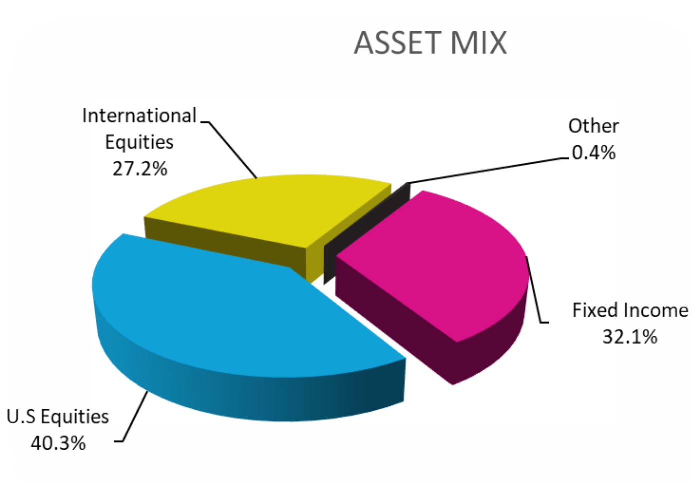
A comparison of the actual investment distribution at June 30, 2023 and 2022, based on the net investment manager holdings, including accrued income, payables and receivables, compared to the target allocation for each year is as follows:

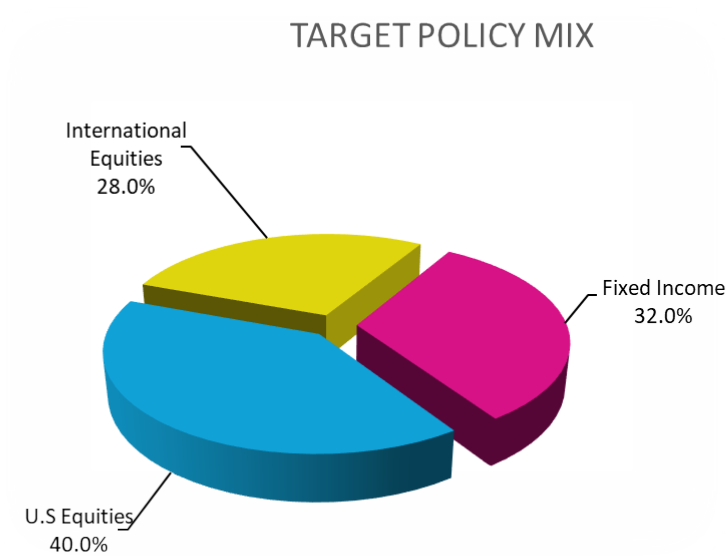
2023





2022





Schedule of Stock Brokerage Commissions Paid

Year Ended June 30, 2023

			Commission	
Brokerage Firm	**Shares Traded**	**Dollar Volume of Trades**	**Dollar Amount**	**Per Share**
Jonestrading Institutional Services	4,011,107	$ 117,455,314	$ 113,147	0.028
Bofa	6,487,456	447,456,244	92,381	0.014
Stifel, Nicolaus & Company	2,260,935	59,672,690	85,683	0.038
J.P. Morgan	5,907,497	481,934,393	84,375	0.014
Instinet	4,547,462	250,950,622	69,964	0.015
Keybanc Capital Markets	1,663,032	47,456,893	65,897	0.040
Robert W. Baird	1,746,790	55,099,587	61,845	0.035
Goldman Sachs	3,070,737	146,300,191	38,498	0.013
Raymond James & Associates	896,408	27,139,177	35,312	0.039
Stephens	638,872	33,685,452	24,938	0.039
Jefferies	935,033	38,330,000	24,206	0.026
Broadcort Capital Corp	889,720	37,075,328	19,809	0.022
Piper Jaffray	504,879	18,656,301	19,007	0.038
Morgan Stanley	1,050,552	64,808,373	18,851	0.018
Keefe Bruyette	458,904	6,896,966	18,356	0.040
Sanford C. Bernstein	521,419	26,307,290	16,016	0.031
Wells Fargo	336,755	24,938,939	13,442	0.040
Merrill Lynch	1,709,747	30,590,386	13,243	0.008
Instinet Europe	1,148,031	31,347,505	12,430	0.011
Citigroup Global Markets	705,103	45,756,046	11,374	0.016
Other	54,816,811	873,937,588	279,270	0.005
Total	94,307,250	$ 2,865,795,287	$ 1,118,043	0.012

ACTUARIAL

MEMBER EDUCATION

THEN: To help members feel confident with completing all the paperwork required for retirement, we offer members a pre-retirement seminar. These were once only held as hours-long in-person meetings all throughout the state.

NOW: As the world changed in the past few years, we transitioned our seminars to a webinar format. We now offer members the option of either in-person or online meetings.

A LOOK AHEAD: We are exploring other ways to provide education. The options are endless… self-paced trainings, long-form and short videos, blogs, social media sites and podcasts. We are excited to experience the many directions we could go.

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

Cavanaugh Macdonald
3550 Busbee Pkwy, Suite 250
Kennesaw, GA 30144

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Fax (678) 388-1730
www.CavMacConsulting.com

November 10, 2023

Board of Trustees
Oklahoma Public Employees Retirement System
5400 N Grand Boulevard, Suite 400
P.O. Box 53007
Oklahoma City, OK 73112-5625

Members of the Board:

In this report are submitted the results of the annual valuation of the assets and liabilities of the State of Oklahoma Public Employees Retirement System ("OPERS" or "System"), prepared as of July 1, 2023.

The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2023 and to provide the actuarially determined rate. While not verifying the data at the source, the actuary performed tests for consistency and reasonability. An experience study was performed covering the period from July 1, 2019 through June 30, 2022, resulting in recommendations that were ultimately adopted by the Board of Trustees. The changes in actuarial assumptions and methods are first reflected in the July 1, 2023 valuation.

The promised benefits of the System are included in the actuarially calculated contribution rates which are developed using the Entry Age Normal cost method. A five-year market-related value of assets is used for actuarial valuation purposes. Gains and losses are reflected in the unfunded actuarial accrued liability (UAAL) that is being amortized by regular annual contributions as a level percentage of payroll, on the assumption that payroll will increase by 3.25% annually.

As in recent valuations, liabilities have been calculated without considering future cost of living adjustments (COLAs) and/or stipends in keeping with House Bill 2132 (2011). Should funding of future COLAs and/or stipends be provided by the System, the COLAs and/or stipends should be included in the actuarial valuation. In addition, House Bill 2630 (2014) closes the plan to most new employees hired after November 1, 2015.

We have prepared the Schedule of Funding Progress and Trend Information shown in the financial section of the Annual Comprehensive Financial Report.

This is to certify that the independent consulting actuaries are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared for funding purposes with assumptions and methods that meet the parameters of the Actuarial Standards of Practice, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results. Future actuarial results may differ significantly from the current results presented in this report due to factors such as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law. Because the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

The Annual Comprehensive Financial Report (ACFR) contains several exhibits that disclose the actuarial position of the System. We have also reviewed the supplemental medical benefits provided by the System under Section 401(h) of the Internal Revenue Code and have determined that these benefits are subordinate to the retirement benefits as required. This annual report, prepared as of July 1, 2023, provides data and tables that we prepared for use in the following sections of the ACFR:

Actuarial Section:

- Analysis of Financial Experience
- Solvency Test
- Schedule of Active Member Valuation Data
- Schedule of Retirants, Disabled Retirants, and Beneficiaries Added to and Removed from Rolls

Statistical Section:

- Member Statistics
- Distribution of Retirees and Beneficiaries
- Summary of Active Members

In our opinion, in order for the System to meet all the benefit obligations of the plan for current active and retired members, contributions equal to at least the actuarially determined rate are necessary for future fiscal years. Assuming these contributions are made to the System, from year to year in the future at the rates recommended on the basis of the successive actuarial valuations, the continued sufficiency of the retirement fund to provide the benefits called for under the System may be safely anticipated. Because the statutory contribution exceeds the actuarially determined rate in this valuation, we recommend the statutory contribution be used to pay the UAAL down faster than under the current schedule and to protect against future investment and experience losses.

Respectfully submitted,

Alisa Bennett, FSA, EA, FCA, MAAA
President

Brent Banister, PhD, FSA, EA, FCA, MAAA
Chief Actuary

Summary of Results

	7/1/2023 Valuation	7/1/2022 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	28,671	29,912	(4.1)
Retired and Disabled Members and Beneficiaries	36,899	36,649	0.7
Inactive Members	6,761	6,454	4.8
Total Members	72,331	73,015	(0.9)
Projected Annual Salaries of Active Members	$ 1,513,007,245	$ 1,527,059,370	(0.9)
Annual Retirement Payments for Retired Members and Beneficiaries	$ 689,589,731	$ 675,895,605	2.0
2. ASSETS AND LIABILITIES			
Total Actuarial Accrued Liability	$ 11,481,956,397	$ 11,139,885,081	3.1
Market Value of Assets	$ 11,152,105,027	$ 10,392,907,883	7.3
Actuarial Value of Assets	$ 11,557,389,515	$ 11,311,760,330	2.2
Unfunded Actuarial Accrued Liability	$ (75,433,118)	$ (171,875,249)	(56.1)
Funded Ratio	100.7%	101.5%	(0.9)
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost Rate	11.08%	10.81%	
Amortization of Unfunded Actuarial Accrued Liability	0.00%	(0.41%)	
Budgeted Expenses	0.59%	0.56%	
Total Actuarially Determined Contribution Rate	11.67%	10.96%	
Less Estimated Member Contribution Rate	4.32%	4.28%	
Employer Actuarially Determined Contribution Rate	7.35%	6.68%	
Less Statutory State Employer Contribution Rate	16.50%	16.50%	
Contribution Shortfall/(Surplus)	(9.15%)	(9.82%)	

Analysis of Financial Experience

Gains & Losses in Actuarial Accrued Liability During the Year Ended June 30, 2023
Resulting from Differences Between Assumed Experience & Actual Experience

	Type of Activity	(Gain) or Loss for Year End 2023
1.	**Age & Service Retirements.** Generally, if members retire at older ages or with smaller benefits than assumed, there is a gain. If they retire at younger ages or have higher average pays, a loss occurs.	$ (12,100,000)
2.	**Disability Retirements.** If disability claims are less than assumed, there is a gain. If more claims, a loss.	500,000
3.	**Deaths.** If more deaths occur than assumed, there is a gain. If fewer, there is a loss.	(24,100,000)
4.	**Withdrawal from Employment.** If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(30,400,000)
5.	**Pay Increases.** If there are smaller pay increase than assumed, there is a gain. If greater increases, a loss.	91,300,000
6.	**New Entrants.** All new entrants to the System create a loss.	20,700,000
7.	**Other.** Miscellaneous gains and losses resulting from data adjustments, employee transfers, valuation methods, etc.	(40,200,000)
8.	**(Gain) or Loss During Year from Financial Experience.**	135,100,000
9.	**Composite (Gain) or Loss During Year.**	$ 140,800,000

Solvency Test

The OPERS funding objective is to be able to pay long-term benefit promises through contributions that remain approximately level from year to year as a percent of salaries earned by members. In this way, members and employers in each year pay their fair share for retirement service accrued in that year by OPERS members.

If the retirement system follows level contribution rate financing principles, the system will pay all promised benefits when due – the ultimate test of financial soundness.

A short-term solvency test is one means of monitoring OPERS funding progress. In a short-term solvency test, the retirement System's present valuation assets are compared with: 1) active member contributions on deposit, 2) the liabilities for future benefits to persons who have retired and the liabilities for terminated employees with vested benefits, and 3) the liabilities for service already rendered by active members. In a system that has been following the discipline of level contribution rate financing, the liabilities for member contributions on deposit (liability 1), the liabilities for future benefits to present retirees and the liabilities for future benefits for terminated employees (liability 2) will be fully covered by present assets, except in rare circumstances.

In addition, the liabilities for service already rendered by members (liability 3) will be partially covered by the remainder of present assets. Generally, if the system has been using level contribution rate financing, the funded portion of liability 3 will increase over time; however, a decrease generally occurs in those years when substantial benefit improvements are granted by the Legislature. It is unusual for liability 3 to be fully funded. The funded ratio of the System based on total actuarial accrued liabilities (1 + 2 + 3) provides an indication of how well the System is funded.

The schedule below illustrates the progress of funding the actuarial accrued liabilities of OPERS.

	Actuarial Accrued Liability and Valuation Assets (in thousands)					Portion of Actuarial Accrued Liability Covered by Reported Assets			
Date	Active Member Contributions (Liability 1)	Retirees, Beneficiaries and Terminated Vested Members (Liability 2)	Employer Financed Portion of Active Members (Liability 3)	Total Liability (1 + 2 + 3)	Reported Assets[1]	(1)	(2)	(3)	Funded Ratio of Total Accrued Actuarial Liability
July 1, 2014	534,081	5,184,818	3,034,770	8,753,669	7,759,258	100	100	67.2	88.6
July 1, 2015	537,046	5,417,604	3,041,476	8,996,126	8,420,307	100	100	81.1	93.6
July 1, 2016	545,020	5,757,019	3,125,771	9,427,810	8,790,886	100	100	79.6	93.2
July 1, 2017	549,211	6,131,997	3,100,409	9,781,617	9,241,292	100	100	82.6	94.5
July 1, 2018	550,806	6,312,792	3,020,536	9,884,134	9,658,126	100	100	92.5	97.7
July 1, 2019	549,813	6,463,941	3,033,620	10,047,374	9,909,684	100	100	95.5	98.6
July 1, 2020	561,222	7,061,087	3,320,770	10,943,079	10,212,241	100	100	78.0	93.3
July 1, 2021	566,231	7,153,298	3,326,711	11,046,240	10,991,205	100	100	84.0	99.5
July 1, 2022	562,043	7,255,971	3,321,871	11,139,885	11,311,760	100	100	100.0	101.5
July 1, 2023	564,283	7,392,756	3,524,917	11,481,956	11,557,390	100	100	100.0	100.7

[1]Actuarial value of assets based on the smoothing technique adopted by Board.

Schedule of Active Member Valuation Data

Valuation Date	Number	Annual Payroll	Annual Average Pay	% Increase in Average Pay
July 1, 2023	28,671	$1,513,007,245	$52,771	3.37
July 1, 2022	29,912	1,527,059,370	51,052	4.01
July 1, 2021	31,711	1,556,561,344	49,086	3.40
July 1, 2020	33,115	1,571,954,116	47,470	3.46
July 1, 2019	34,536	1,584,630,994	45,883	4.11
July 1, 2018	36,329	1,601,074,591	44,072	1.46
July 1, 2017	38,873	1,688,543,856	43,437	1.40
July 1, 2016	41,806	1,790,809,603	42,836	3.82
July 1, 2015	43,843	1,808,972,785	41,260	3.97
July 1, 2014	43,947	1,744,041,536	39,685	1.29

Schedule of Retirants, Disabled Retirants, and Beneficiaries Added to and Removed from Rolls

	Added to Rolls		Removed from Rolls		Rolls – End of Year			
Year Ended	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	% Increase in Annual Allowances	Average Annual Allowances
June 30, 2023	1,406	$30,826,481	1,156	$ 16,398,338	36,899	$ 689,666,049	2.04	$18,691
June 30, 2022	1,540	33,720,630	1,242	17,557,131	36,649	675,895,605	2.25	$18,442
June 30, 2021	1,533	32,437,822	1,361	18,575,689	36,351	661,011,030	1.90	18,184
June 30, 2020	1,475	29,864,562	1,165	15,376,187	36,179	648,673,669	5.55	17,930
June 30, 2019	1,692	33,093,583	1,083	13,816,679	35,869	614,578,512	3.24	17,134
June 30, 2018	1,692	31,763,873	1,011	13,010,324	35,260	595,301,608	3.25	16,883
June 30, 2017	1,846	35,653,217	1,016	12,736,245	34,579	576,548,059	4.14	16,673
June 30, 2016	1,986	37,356,248	991	12,505,069	33,749	553,631,087	4.70	16,404
June 30, 2015	1,898	35,731,879	977	11,895,298	32,754	528,779,908	4.72	16,144
June 30, 2014	1,667	28,477,713	969	11,707,809	31,833	504,943,327	3.44	15,862

Supplementary Information

The schedule of changes in the net pension and OPEB liabilities present a schedule of funding progress for each of the ten most recent years based on the actuarial methods and assumptions used for funding purposes. These schedules are intended to show a 10-year trend and additional years will be reported as they become available. 2017 was the first year to exclude the Medical Supplement.

GASB 67 Paragraph 36.b.
Schedule of Changes in the Net Pension Liability/(Asset)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability	$11,173,394,259	$10,828,046,484	$10,725,571,917	$10,614,647,291	$9,726,326,176	$9,555,990,069	$9,454,641,808	$9,427,809,623	$8,996,125,901	$8,753,669,153
Plan Fiduciary Net Position	10,715,573,451	9,987,481,670	12,067,732,648	9,722,484,043	9,593,138,099	9,360,947,061	8,913,978,627	8,435,578,907	8,636,441,984	8,570,104,910
Net Pension Liability	$457,520,808	$840,564,814	($1,342,160,731)	$892,163,248	$133,188,077	$195,043,008	$540,663,181	$992,230,716	$359,683,917	$183,564,243
Ratio of Plan Fiduciary Net Position to Total Pension Liability	95.91%	92.24%	112.51%	91.59%	98.63%	97.96%	94.28%	89.48%	96.00%	97.90%
Covered payroll	$1,527,059,000	$1,556,561,000	$1,571,954,000	$1,584,631,000	$1,601,075,000	$1,688,544,000	$1,790,809,603	$1,808,972,785	$1,744,041,536	$1,695,347,809
Net Pension Liability as a percentage of covered payroll	29.96%	54.00%	-85.38%	56.30%	8.32%	11.55%	30.19%	54.85%	20.62%	10.83%

GASB 74 Paragraph 36.b.
Schedule of Changes in the Net OPEB Liability/(Asset)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total OPEB Liability	$308,562,138	$311,838,597	$320,668,249	$328,431,762	$321,048,037	$328,143,546	$326,975,262			
Plan Fiduciary Net Position	436,231,576	405,426,213	458,150,586	375,314,784	359,922,778	341,084,506	315,521,246			
Net OPEB Liability	($127,669,438)	($93,587,616)	($137,482,337)	($46,883,022)	($38,874,741)	($12,940,960)	$11,454,016			
Ratio of Plan Fiduciary Net Position to Total OPEB Liability	141.38%	130.01%	142.87%	114.27%	112.11%	103.94%	96.50%			
Covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Net OPEB Liability as a percentage of covered payroll	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

Summary of System Provisions

Effective Date:

The System became effective January 1, 1964. The fiscal year is July 1 to June 30.

Employees Included:

All permanent employees of the State of Oklahoma, and any other employer such as a county, county hospital, city or town, conservation districts, circuit engineering districts, and any trust in which a county, city, or town participates and is the primary beneficiary, are eligible to join if:

- the employee is not eligible for or participating in another retirement system authorized under Oklahoma law, is covered by Social Security and not participating in the U.S. Civil Service Retirement System,
- the employee is scheduled for 1,000 hours per year and salary is not less than the hourly rate of the monthly minimum wage for State employees (for employees of local government employers, not less than the hourly rate of the monthly minimum wage for such employees).

Membership is mandatory for new eligible employees on the first of the month following employment. Beginning November 1, 2015, most new state employees are excluded from participating in the defined benefit plan.

Employee and Employer Contributions:

3.5% of pay for most State employees and 16.5% for employers. Local employees, elected officials, members covered by the Department of Corrections Hazardous Duty provisions, and members who elect the step up provision contribute at varying rates.

Final Average Compensation:

Generally the highest annual average of any thirty-six months within the last ten years of participating service. For members hired on or after July 1, 2013, the highest annual average of any sixty months within the last ten years of participating service.

Retirement Date:

Normal:

Age 62 (age 60 for elected officials), 80 age/service points if hired before July 1, 1992, 90 age/service points if hired on or after July 1, 1992.

For non-elected employees hired on or after November 1, 2011, the retirement age is age 65 or 90 age/service points if at least 60. For elected officials hired on or after November 1, 2011, age 65 with 8 years of service or 62 with 10 years of service.

Summary of System Provisions (continued)

20 years of service for certain members covered by the Department of Corrections Hazardous Duty provisions, Grand River Dam Authority Public Safety Officers Provisions, and certain Oklahoma Military Department Firefighters.

Early: Age 55 with 10 years of service.

Normal Retirement Benefit: General formula is 2% of final average compensation multiplied by years of credited service.

Disability Benefit: After eight years of service, provided the member qualifies for disability benefits as certified either by the Social Security Administration or the Railroad Retirement Board. Benefit is determined by the normal retirement formula based on service and salary history at date of disability. The benefit is payable immediately without actuarial reduction.

In-service Death Benefit: If the deceased member was vested, the benefit that would have been paid the member had he retired and elected the joint and 100% survivor option (Option B).

For elected officials, it is 50% of the benefit that would have been paid the member had he retired.

Postretirement Death Benefit: $5,000 lump-sum.

Forms of Payment: Life annuity, joint and 50% survivor, joint and 100% survivor annuity, life annuity with a minimum of 120 monthly payments, and Medicare Gap Benefit option.

Supplemental Medical Insurance Premium: The System will contribute the lesser of $105 per month or the Medicare Supplement Premium to the Office of Management and Enterprise Services, Employees Group Insurance Division (or other eligible employer health plans) for members receiving retirement benefits.

Summary of Actuarial Assumptions and Methods

1. The investment return rate used in the valuation was 6.50 percent per year, net of investment expenses, compounded annually. This rate of return is not the assumed real rate of return. The real rate of return is the rate of return in excess of the inflation rate. Considering other financial assumptions, the 6.50 percent investment return rate translates to an assumed real rate of return of 4.00 percent.

2. Pub-2010 Below Median, General Membership Active/Retiree Healthy Mortality Table with base rates projected generationally using Scale MP-2019. Male rates are unadjusted and female rates are set forward two years.

3. The probabilities of withdrawal from service, together with individual pay increase assumptions, are shown in Schedule 1.

4. The probabilities of retirement with an age and service allowance are shown in Schedules 2A, 2B and 2C.

5. Because of the passage of House Bill 2132, benefits are not assumed to increase due to future ad hoc cost-of-living increases.

6. The individual entry-age normal actuarial cost method of valuation was used in determining actuarial accrued liability and normal cost. The unfunded actuarial accrued liability as of July 1, 2021 is amortized as a level percent of payroll over a 20-year closed period commencing July 1, 2007. New experience bases due to assumption changes or actual experience gains/losses will be established each year and amortized over closed 15-year periods.

7. The actuarial value of assets is based on a five-year moving average of expected actuarial values and market values. A preliminary expected value is determined equal to the prior year's actuarial value of assets plus net cash flow for the year ending on the valuation date, assuming the valuation investment return. The expected actuarial asset value is equal to the preliminary expected actuarial value plus the unrecognized investment gains and losses as of the beginning of the previous fiscal year. Twenty percent (20%) of the gain/loss as measured by the difference between the expected actuarial value and the market value at the valuation date is added to the preliminary expected actuarial value plus twenty percent (20%) of the unrecognized gains or losses for the four preceding fiscal years. The final result is constrained to a value no less than 80% and no more than 120% of the market value at the valuation date.

8. The actuarial assumptions and methods used in the valuation were adopted by the Board based on System experience from July 1, 2019 through June 30, 2022.

Summary of Actuarial Assumptions and Methods (continued)

Schedule 1

Withdrawal From Active Employment Before Age & Service Retirement and Individual Pay Increase Assumptions

Sample Service Values	Withdrawal	Sample Ages	Percent Increase in Individual's Pay During Next Year
1	22.00%	25	7.55%
5	10.50	30	6.05
10	6.00	35	5.25
15	4.30	40	4.95
20	3.00	45	4.55
25	1.80	50	4.25
		55	4.05
		60	3.55
		65	3.25

Schedule 2A

Percent of Regular Non-Elected Members Retiring Within Next Year

	Hired Prior to 11/1/2011		Hired on or After 11/1/2011	
Retirement Ages	Eligible for Unreduced	Eligible for Reduced	Eligible for Unreduced	Eligible for Reduced
50-54	15%			
55	10%	3.5%		
56	10%	3.5%		
57	11%	3.5%		
58	12%	3.5%		
59	13%	4.5%		
60	14%	5.25%	30/15%*	5%
61	20%	11%	30/15%*	6%
62	25%		30/15%*	6%
63	15%		30/15%*	6%
64	15%		30/15%*	13%
65	30%		30/15%*	
66-69	30%		25%	
70-74	40%		50%	
75	100%		100%	

*30% when first eligible to retire and 15% thereafter

Summary of Actuarial Assumptions and Methods (continued)

Schedule 2B

Percent of Elected Members Retiring Within Next Year

	Elected Prior to 11/1/2011		Elected on or After 11/1/2011	
Retirement Ages	**Eligible for Unreduced**	**Eligible for Reduced**	**Eligible for Unreduced**	**Eligible for Reduced**
50-54	25%			
55-59	20%	7%		
60-61	20%			10%
62-66	20%		20%	
67-74	35%		35%	
75	100%		100%	

Schedule 2C

Percent of Hazardous Duty Members Retiring Within Next Year

Hazardous Duty Members With Less Than 20 Years of Service

Retirement Ages	Hired Prior To 11/1/2011	Hired on or After 11/1/2011
55	4%	
56-59	5%	
60	5%	7%
61	20%	20%
62	40%	20%
63	22%	20%
64	25%	20%
65	40%	40%
66	25%	25%
67	25%	23%
68	25%	22%
69	25%	21%
70	100%	100%

Summary of Actuarial Assumptions and Methods (continued)

Hazardous Duty Members With 20 or More Years of Service

Service	Percent
20	25%
21	25%
22	20%
23 - 24	15%
25 - 29	23%
30 - 34	25%
35	100%

STATISTICAL

RETIREMENT PROCESS

THEN: The complex retirement process began with a member turning in a Retirement Notice and Application. This set off a series of back-and-forth letters with multiple new forms to complete. We eventually combined all those forms, instructions and information into a single packet, but the process could still feel overwhelming and repetitive.

NOW: Today, a member can log on to our website using a computer or their phone to complete a single digital form and upload digital copies of documents. The process is quicker for the member and results in significantly fewer mistakes.

A LOOK AHEAD: We hope to further streamline processes, shorten timelines, and keep the member better informed throughout the process.

The Statistical Section provides additional historical perspective, context, and detail to assist the reader in using the information in the financial statements, notes to financial statements and required supplementary information to understand and assess the economic condition of the Oklahoma Public Employees Retirement System (OPERS) on a combined basis, including both the Defined Benefit Pension Plan and the Health Insurance Subsidy Plan*.*

Financial trend information is intended to assist users in understanding and assessing the changes in the financial position over time. Schedules presenting financial trend information are *Schedule of Changes in Fiduciary Net Position, Schedule of Revenue by Source, Schedule of Expenses by Type, Schedule of Benefit Payments and Refunds by Type,* and *Funded Ratio Chart*.

Revenue capacity information is intended to assist users in understanding and assessing the factors affecting the ability of OPERS to generate own-source revenue, specifically investment income. The schedule presenting revenue capacity information is the *Rate of Return by Type of Investment.*

Operating information is intended to provide contextual information about the operations and resources of OPERS to assist readers in using financial statement information to understand and assess the economic condition. Schedules and charts presenting operating information are *Schedule of Retired Members by Type of Benefit, Schedule of Average Benefit Payments, Principal Participating Employer, Demographics Chart, Participating Employers, Member Statistics*, Distribution of Retirees and Beneficiaries*, Summary of Active Members*.*

Schedules and information are derived from OPERS internal sources unless otherwise noted.
*Schedules and data are provided by actuarial consultant Cavanaugh McDonald, LLC.

Schedule of Changes in Fiduciary Net Position

Year Ended June 30,	Additions			Deductions			Total Changes in Fiduciary Net Position
	Member Contributions	Employer Contributions	Investment Income (Loss)	Benefit Payments	Administrative Expenses	Refunds	
2023	$ 68,660,051	$ 312,992,730	$ 1,102,763,645	$ 705,401,099	$ 6,665,940	$ 13,152,243	$ 759,197,144
2022	66,392,310	299,743,221	(1,788,499,242)	692,813,323	5,892,553	11,905,764	(2,132,975,351)
2021	66,204,166	293,018,730	2,764,349,697	679,280,964	5,474,638	10,732,584	2,428,084,407
2020	67,808,024	294,118,022	449,829,713	646,840,289	5,726,012	14,451,508	144,737,950
2019	66,566,433	282,473,659	568,130,487	639,964,683	5,754,961	15,369,288	251,029,310
2018	66,929,560	277,987,270	760,477,994	611,565,882	5,339,987	15,957,261	472,531,694
2017	70,276,234	288,338,941	1,049,614,508	592,961,277	5,397,137	15,950,303	793,920,966
2016	73,800,890	296,249,191	15,756,524	565,412,267	5,394,992	15,862,423	(200,863,077)
2015	73,145,380	292,184,940	264,289,114	542,488,709	5,182,848	15,610,803	66,337,074
2014	70,523,854	280,047,664	1,317,980,271	520,641,175	4,708,895	14,878,427	1,128,323,292

Schedule of Revenue by Source

Year Ended June 30,	Member Contributions	Employer Contributions Dollars	Employer Contributions % of Annual Covered Payroll	Investment Income (Loss)	Total
2023	$ 68,660,051	$ 312,992,730	20.69 %	$ 1,102,763,645	$ 1,484,416,426
2022	66,392,310	299,743,221	19.63	(1,788,499,242)	(1,422,363,711)
2021	66,204,166	293,018,730	18.82	2,764,349,697	3,123,572,593
2020	67,808,024	294,118,022	18.71	449,829,713	811,755,759
2019	66,566,433	282,473,659	17.83	568,130,487	912,118,242
2018	66,929,560	277,987,270	17.36	760,477,994	1,105,394,824
2017	70,276,234	288,338,941	17.08	1,049,614,508	1,408,229,683
2016	73,800,890	296,249,191	16.54	15,756,524	385,806,605
2015	73,145,380	292,184,940	16.15	264,289,114	629,619,434
2014	70,523,854	280,047,664	16.06	1,317,980,271	1,668,551,789

Schedule of Expenses by Type

Year Ended June 30,	Benefit Payments	Administrative Expenses	Withdrawals	Total
2023	$ 705,401,099	$ 6,665,940	$ 13,152,243	$ 725,219,282
2022	692,813,323	5,892,553	11,905,764	710,611,640
2021	679,280,964	5,474,638	10,732,584	695,488,186
2020	646,840,289	5,726,012	14,451,508	667,017,809
2019	639,964,684	5,754,961	15,369,288	661,088,932
2018	611,565,882	5,339,987	15,957,261	632,863,130
2017	592,961,277	5,397,137	15,950,303	614,308,717
2016	565,412,267	5,394,992	15,862,423	586,669,682
2015	542,488,709	5,182,848	15,610,803	563,282,360
2014	520,641,175	4,708,895	14,878,427	540,228,497

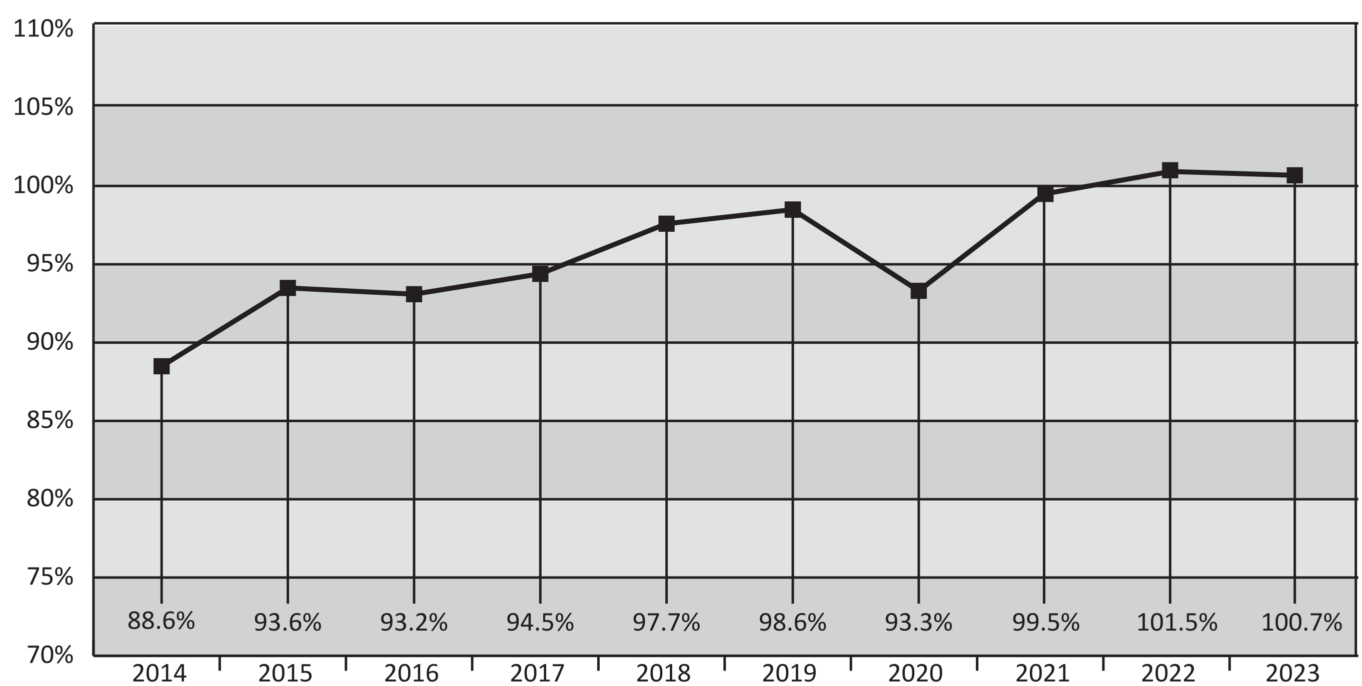
Schedule of Benefit Payments and Refunds by Type

The following schedule provides information as to the type of benefit expenses incurred by the Plan as reflected in the "Benefit Payment" and "Refunds" columns of the **Schedule of Expenses by Type** included elsewhere in this Statistical Section.

Year	Benefits			Refunds				Total Benefit
Ended June 30,	Age and Service	Disability	Beneficiary Death	Withdrawals	Transfers to Systems	Member Death	Other	Payments and Refunds
2023	$ 684,354,804	$ 15,307,570	$ 5,738,725	$ 7,931,012	$ 3,733,475	$ 1,120,721	$ 367,035	$718,553,342
2022	670,557,157	15,968,220	6,287,946	8,599,383	2,325,154	853,773	127,454	704,719,087
2021	656,256,513	16,578,207	6,446,243	7,293,815	2,150,564	1,215,103	73,103	690,013,548
2020	624,283,035	16,704,506	5,852,750	8,297,248	4,930,490	789,120	434,650	661,291,798
2019	616,796,975	17,598,163	5,569,545	10,664,312	3,522,635	881,612	300,729	655,333,972
2018	588,815,903	17,173,572	5,576,407	10,704,430	4,128,787	916,168	207,876	627,523,143
2017	569,870,507	17,597,316	5,493,454	11,827,836	3,219,022	746,849	156,596	608,911,580
2016	542,788,467	17,433,604	5,190,196	9,866,169	5,069,244	798,666	128,344	581,274,690
2015	522,513,529	14,775,998	5,199,181	10,562,956	3,988,925	897,939	160,984	558,099,512
2014	498,432,095	17,292,985	4,916,095	10,276,798	3,881,544	682,179	37,906	535,519,602

Funded Ratio Chart

As of July 1



Rate of Return by Type of Investment

Year Ended June 30,	Fixed Income	U.S. Equity	International Equity	Total
2023	(1.0) %	19.0 %	13.5 %	10.9 %
2022	(11.0)	(13.1)	(20.8)	(14.5)
2021	0.1	46.0	36.9	28.0
2020	11.7	3.8	(3.2)	4.5
2019	8.4	7.1	2.0	6.1
2018	0.3	15.5	7.3	8.4
2017	(0.6)	19.6	19.2	12.8
2016	7.1	(0.2)	(7.7)	0.3
2015	2.5	7.9	(4.4)	3.2
2014	5.1	25.6	21.9	18.0

Schedule of Retired Members by Type of Benefit

June 30, 2023

Amount of Monthly Benefit	Number of Retirees	Type of Retirement					Option Selected			
		1	2	3	4	5	1	2	3	4
$1 – 1,000	14,762	8,286	2,920	2,445	775	336	8,145	2,890	3,504	223
1,001 – 2,000	12,105	9,856	610	1,258	373	8	6,684	2,079	3,182	160
2,001 – 3,000	6,160	5,683	62	389	26	-	3,221	1,089	1,748	102
3,001 – 4,000	2,275	2,107	8	157	3	-	1,102	383	755	35
4,001 – 5,000	897	858	5	34	-	-	444	155	285	13
Over 5,000	700	677	4	19	-	-	359	105	228	8
Totals	**36,899**	**27,467**	**3,609**	**4,302**	**1,177**	**344**	**19,955**	**6,701**	**9,702**	**541**

Type of Retirement

Type 1 – *Normal retirement for age and service:* Eligible at (1) age 62 or (2) when the sum of the member's age plus years of service equals 80 points for those who became members before July 1, 1992 and 90 points for those becoming members after that date. Members joining OPERS after November 1, 2011 are eligible at (1) age 65 or (2) when reaching 90 points and at least age 60.

Type 2 – *Early retirement: Eligible beginning at age 55 with ten (10) years of participating service. Members joining OPERS after November 1, 2011 are eligible for early retirement beginning at age 60.*

Type 3 – *Survivor payment:* Normal or early retirement.

Type 4 – *Disability:* Eligible if member is qualified for payment of disability benefits as certified by the Social Security Administration, has eight (8) years of credited service, and has terminated employment.

Type 5 – *Survivor payment:* Disability retirement.

Option Selected

Option 1 – *Single-life annuity:* The maximum benefit is paid for the member's lifetime.

Option 2 – *Option A – ½ Joint and Survivor Annuity:* The member will receive a reduced retirement benefit for life and ½ of the reduced retirement benefit will be paid to the surviving joint annuitant for their lifetime.

Option 3 – *Option B – 100% Joint and Survivor Annuity:* A reduced benefit is paid to the member for life and the same benefit is paid to a surviving joint annuitant for their lifetime.

Option 4 – *Option C – Single-life Annuity with a 10-Year Certain Period:* The member will receive a reduced benefit for their lifetime. If the member dies within ten years of when the benefit payments began, the monthly payment will be made to the beneficiary for the balance of the 10-year period.

Deferred Members

At June 30, 2023, there are 6,761 former members with deferred future benefits.

Schedule of Average Benefit Payments

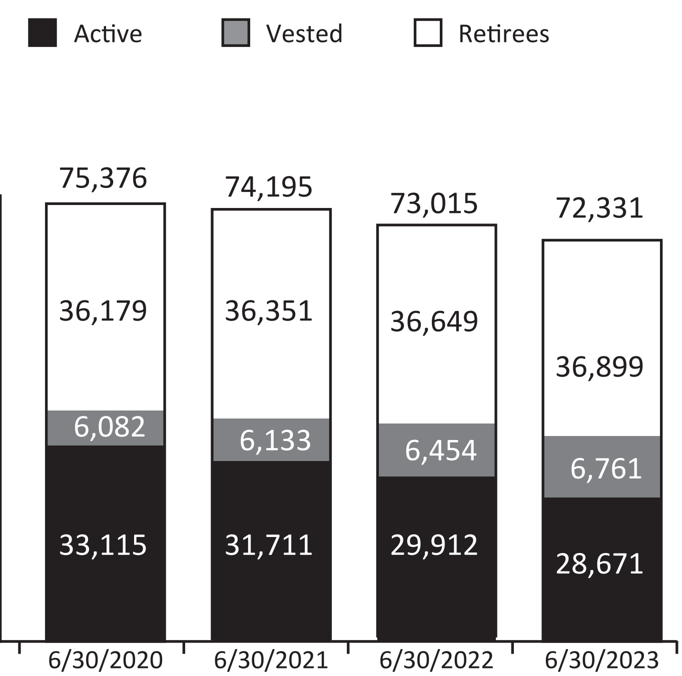
Retirement Effective Dates	Years of Credited Service						
July 1, 2013 to June 30, 2023	**0 to 5**	**6 to 10**	**11 to 15**	**16 to 20**	**21 to 25**	**26 to 30**	**31+**
Period 7/1/13 to 6/30/14							
Average Monthly Benefit	$ -	$ 476	$ 741	$ 1,107	$ 1,620	$ 2,382	$ 2,790
Average Final Average Salary	$ -	$ 3,060	$ 3,069	$ 3,325	$ 3,579	$ 4,176	$ 4,202
Number of Active Retirees	-	292	331	243	295	245	256
Period 7/1/14 to 6/30/15							
Average Monthly Benefit	$ 623	$ 487	$ 771	$ 1,216	$ 1,728	$ 2,360	$ 3,003
Average Final Average Salary	$ 2,387	$ 2,924	$ 3,146	$ 3,484	$ 3,687	$ 4,252	$ 4,303
Number of Active Retirees	2	292	323	311	331	321	310
Period 7/1/15 to 6/30/16							
Average Monthly Benefit	$ 159	$ 491	$ 772	$ 1,163	$ 1,586	$ 2,196	$ 3,100
Average Final Average Salary	$ 1,900	$ 3,121	$ 3,253	$ 3,410	$ 3,506	$ 3,949	$ 4,505
Number of Active Retirees	5	300	342	308	301	358	370
Period 7/1/16 to 6/30/17							
Average Monthly Benefit	$ 362	$ 546	$ 813	$ 1,230	$ 1,714	$ 2,393	$ 3,324
Average Final Average Salary	$ 4,716	$ 3,241	$ 3,265	$ 3,626	$ 3,789	$ 4,256	$ 4,716
Number of Active Retirees	4	293	377	295	257	292	326
Period 7/1/17 to 6/30/18							
Average Monthly Benefit	$ -	$ 552	$ 787	$ 1,202	$ 1,622	$ 2,448	$ 3,310
Average Final Average Salary	$ -	$ 3,225	$ 3,328	$ 3,493	$ 3,657	$ 4,406	$ 4,787
Number of Active Retirees	-	260	335	324	237	256	281
Period 7/1/18 to 6/30/19							
Average Monthly Benefit	$ 702	$ 578	$ 834	$ 1,343	$ 1,845	$ 2,521	$ 3,412
Average Final Average Salary	$ 7,635	$ 3,346	$ 3,451	$ 3,824	$ 4,038	$ 4,427	$ 4,854
Number of Active Retirees	3	290	379	277	230	225	284
Period 7/1/19 to 6/30/20							
Average Monthly Benefit	$ 111	$ 574	$ 853	$ 1,261	$ 1,731	$ 2,640	$ 3,425
Average Final Average Salary	$ 2,281	$ 3,477	$ 3,498	$ 3,872	$ 3,980	$ 4,786	$ 4,977
Number of Active Retirees	1	255	303	265	200	178	274
Period 7/1/20 to 6/30/21							
Average Monthly Benefit	$ 170	$ 553	$ 928	$ 1,324	$ 1,866	$ 2,580	$ 3,512
Average Final Average Salary	$ 2,592	$ 3,388	$ 3,668	$ 3,785	$ 4,161	$ 4,586	$ 5,042
Number of Active Retirees	4	239	330	251	238	172	297
Period 7/1/21 to 6/30/22							
Average Monthly Benefit	$ -	$ 580	$ 878	$ 1,374	$ 1,850	$ 2,546	$ 3,589
Average Final Average Salary	$ -	$ 3,509	$ 3,617	$ 3,941	$ 4,213	$ 4,666	$ 5,213
Number of Active Retirees	-	244	281	289	239	148	336
Period 7/1/22 to 6/30/23							
Average Monthly Benefit	$ 194	$ 607	$ 971	$ 1,466	$ 1,936	$ 2,513	$ 3,700
Average Final Average Salary	$ 2,126	$ 3,537	$ 3,860	$ 4,262	$ 4,267	$ 4,648	$ 5,247
Number of Active Retirees	2	234	286	253	205	149	277

Principal Participating Employer

The Oklahoma Public Employees Retirement System is a multiple-employer cost-sharing public employee retirement plan. The Plan covers all state employees that are not covered by six other plans and employees of participating county and local agencies in the State. The State of Oklahoma is the principal participating employer. A list of participating state, county and local agencies is included elsewhere in this Statistical Section.

Year Ended June 30,	Covered Employees of the State	Percent of Total System
2023	17,407	60.7 %
2022	18,673	62.4
2021	20,471	64.6
2020	22,467	67.8
2019	23,610	68.4
2018	25,594	70.5
2017	27,850	71.6
2016	30,776	73.6
2015	33,002	75.3
2014	33,242	75.6

Demographics Chart



Participating Employers

State Agencies

ABLE Commission
Abstractors, Board of
Accountancy, Board of Public
Aeronautics Commission
Agriculture, Department of
Architects, Board of Governors
Arts Council, State
Attorney General's Office
Auditor and Inspector
Banking Department
Behavioral Health Licensure, Board of
Boll Weevil Eradication Organization
Bond Advisor, Office of the State
Broadband Office
Cardinal Point Public Trust
Children and Youth, Commission on
Chiropractic Examiners, Board of
Commerce, Department of
Conservation Commission
Construction Industries Board
Consumer Credit, Department of
Commission for Education Quality & Accountability
Corporation Commission
Corrections, Department of
Cosmetology, Board of
Council on Judicial Complaints
Court of Criminal Appeals
Davis Gun Museum
Dentistry, Board of
Disability Concerns, Office of
District Attorneys' Council
District Courts
Educational Television Authority
Election Board, State
Emergency Management
Employment Security Commission
Engineers and Surveyors, Board of
Environmental Quality, Department of
Ethics Commission
Finance, State Office of
Fire Marshall Commission, State
Firefighters Pension and Retirement Board
Funeral Board
Garfield County Criminal Justice Trust Authority
Governor's Office
Grand River Dam Authority
Grady County Fairgrounds Trust
Health, Department of
Heath Care Authority
Historical Society
Horse Racing Commission
House of Representatives
Housing Finance Agency
Human Services, Department of
Indigent Defense System
Industrial Finance Authority
Insurance Department, State
Interstate Oil Compact Commission
Investigation, State Bureau of
Juvenile Affairs, Office of
Labor, Department of
Land Office, Commissioners of the
Law Enforcement Education and Training, Council on
Law Enforcement Retirement System
Legislative Service Bureau
Libraries, Department of
Licensed Alcohol and Drug Counselors, Board of
Licensed Social Workers, Registration Board of
Lieutenant Governor, Office of
Liquefied Petroleum Gas Administration
Lottery Commission
J.D. McCarty Center
Medical Licensure Board
Medical Marijuana Authority
Medicolegal Investigations, Board of
Mental Health & Substance Abuse, Department of
Merit Protection Commission
Military Department
Mines, Department of
Motor Vehicle Commission
Multiple Injury Trust Fund
Municipal Power Authority
Narcotics and Dangerous Drugs Control, Bureau of
Native American Cultural and Education, Authority of Oklahoma
Nursing, Board of
Nursing Home Administrators, Board of Examiners for
Optometry Board
Ordnance Works Authority
Osteopathic Examiners, State Board of
Pardon and Parole Board
Pharmacy, Board of
Physicians Manpower Training Commission
Police Pension and Retirement
Psychologists Examiners, Board of
Public Employees Retirement System
Public Safety, Department of
Real Estate Commission
Rehabilitation, Department of
Science and Technology, Center for Advancement of
Secretary of State, Office of the
Securities Commission
Senate, State
Space Industry Development Authority
Speech Pathology and Audiology Board
Supreme Court
Tax Commission
Test for Alcohol and Drug Influence Board
Tobacco Settlement Trusts
Tourism and Recreation Department
Transportation, Department of
Treasurer's Office, State
Turnpike Authority
Uniform Building Code Commission
University Health Sciences Center
University Hospitals Trust
Used Motor Vehicles and Parts Commission
Veterans Affairs, Department of
Veterinary Medical Examiners, State Board of
Waters Resources Board
Wheat Commission
Workers' Compensation Court
Workers' Compensation Commission

Counties and County Governmental Units

Adair County
Alfalfa County
Alfalfa County Rural Water District
Atoka County
Atoka County Rural Water District #2
Atoka County Rural Water District #4
Beaver County
Beaver County Memorial Hospital
Beckham County
Blaine County
Bryan County
Caddo County
Canadian County
Carter County
Cherokee County
Choctaw County
Choctaw County Ambulance
Cimarron County
Cleveland County
Coal County
Comanche County
Comanche County Facilities Authority

Participating Employers (continued)

Cotton County
Craig County
Creek County
Creek County Rural Water District #3
Creek County Rural Water District #5
Custer County
Delaware County
Delaware County E-911 Trust Authority
Delaware County Solid Waste Trust Authority
Dewey County
Ellis County
Garfield County
Garfield County Fairgrounds Trust Auth.
Garvin County
Grady County
Grady County Criminal Justice Authority
Grady County EMS
Grant County
Greer County
Greer County Special Ambulance Service
Harmon County
Harper County
Haskell County
Hughes County
Jackson County
Jefferson County
Johnston County
Johnston County Rural Water District
Kay County
Kay County Justice Facilities Authority
Kingfisher County
Kiowa County
Latimer County
LeFlore County
LeFlore County EMS
LeFlore County Rural Water and Sewer
LeFlore County Rural Water District #3
Lincoln County
Lincoln County E-911 Trust Authority
Logan County
Love County
Major County
Major County EMS
Marshall County
Mayes County
Mayes County Rural Water District #3
Mayes Emergency Services Trust Authority
McClain County
McClain-911 Trust Authority
McClain-Grady County EMS
McCurtain County
McCurtain County EMS
McIntosh County
Murray County
Muskogee County
Muskogee County EMS
Noble County
Nowata County
Nowata Consolidated Rural Water District #1
Okfuskee County
Okmulgee County
Okmulgee County Criminal Justice Authority
Osage County
Ottawa County
Ottawa County E-911 Authority
Pawnee County
Payne County
Pittsburg County
Pittsburg County Rural Water District #7
Pontotoc County
Pottawatomie County
Pottawatomie County Public Safety Center
Pushmataha County
Roger Mills County
Rogers County
Seminole County
Sequoyah County
Sequoyah County 911 Trust Authority
Sequoyah County Rural Water District #7
Stephens County
Texas County
Tillman County
Tillman County EMS
Tillman County Rural Water District
Wagoner County
Washington County
Washita County
Woods County
Woodward County

Towns, Cities and Municipal Governmental Units

Anadarko Housing Authority
Arnett, Town of
Beaver, City of
Bixby, City of
Bixby Public Works
Cheyenne, City of
Commerce, City of
Cyril, Town of
Fairfax, Town of
Fort Supply, Town of
Grandfield, City of
Grove, City of
Grove Municipal Airport Managing Authority
Heavener, City of
Heavener Utility Authority
Hinton, Town of
Holdenville, City of
Holdenville Housing Authority
Hugo, City of
Idabel Housing Authority
Indianola Rural Water District #18
Ketchum, City of
Ketchum Public Works
Kingfisher, City of
Mangum, City of
Mountain View, City of
Muskogee City-County 911 Trust Authority
Okarche, City of
Poteau Valley Improvement Authority
Rush Springs, Town of
Ryan, City of
Sentinel, Town of
Shattuck, City of
Sportsmen Acres, Town of
Stigler, City of
Tahlequah, City of
Vici, Town of
Watonga Housing Authority
Watts Public Works Authority
Wewoka, City of
Wilson, City of

Other Governmental Units

Association of South Central Oklahoma Government
Circuit Engineering District #4
Circuit Engineering District #6
Eastern Oklahoma Circuit Engineering District #2
Eastern Oklahoma District Library
Grand Gateway Economic Development Association
Kiamichi Economical Development District of Oklahoma
Midwestern Oklahoma Development Authority
Northeast Oklahoma Enhanced 911 Trust Authority
Northern Oklahoma Development Authority
Northwestern Oklahoma Solid Waste Disposal Authority
Oklahoma Environmental Management Authority
Southeast Circuit Engineering District #3
Southwestern Oklahoma Ambulance Authority
Southwestern Oklahoma Developmental Authority
Tri-County Rural Water District

Member Statistics

Inactive members as of July 1, 2023	Number	Amount of Annual Benefit
Members receiving benefits		
Retired	31,074	$ 617,609,798
Surviving spouses	4,648	59,343,337
Disabled	1,177	12,712,914
Total	**36,899**	**$ 689,666,049**
Members with deferred benefits		
Vested terminated	2,659	$ 31,815,739
Assumed deferred vested members (estimated benefits)	4,102	39,586,940
Total	**6,761**	**$ 71,402,679**

	Average			
Statistics for	**Number**	**Age**	**Service**	**Earnings**
Active members as of July 1, 2022				
Continuing	26,793	49.2	13.4	$ 51,173
New	3,119	38.7	2.0	29,757
Total	**29,912**	**48.1**	**12.2**	**$ 48,940**
Active members as of July 1, 2023				
Continuing	25,433	49.4	13.6	$ 54,129
New	3,238	39.6	2.0	22,514
Total	**28,671**	**48.3**	**12.3**	**$ 50,558**

Distribution of Retirees and Beneficiaries

	Number			Annual Benefits		
Age	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Under 50	92	81	173	$ 1,584,659	$ 1,000,437	$ 2,585,096
50-55	154	127	281	3,700,100	2,335,382	6,035,482
55-60	589	607	1,196	15,152,943	13,717,879	28,870,822
60-65	1,712	2,379	4,091	41,626,180	50,887,843	92,514,023
65-70	2,970	4,700	7,670	62,199,328	89,143,117	151,342,445
70-75	3,437	4,983	8,420	69,404,313	89,912,195	159,316,508
75-80	2,895	4,066	6,961	56,148,504	66,086,229	122,234,733
80-85	1,763	2,726	4,489	33,038,968	41,463,727	74,502,695
85-90	843	1,545	2,388	14,258,949	20,896,046	35,154,995
90-95	269	716	985	4,721,584	9,311,903	14,033,487
95-100	56	159	215	862,380	1,891,551	2,753,931
Over 100	3	27	30	57,535	264,297	321,832
Total	**14,783**	**22,116**	**36,899**	**$ 302,755,443**	**$ 386,910,606**	**$ 689,666,049**

Summary of Active Members

Age and years of credited service
Earnings tabulated are average rates of pay as of July 1, 2023

Age	Years of Service									
	0 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up	Total
Under 25	933	12								**945**
Average Pay	$25,655	$41,722								**$25,859**
25 to 29	1,015	326	11							**1,352**
Average Pay	$33,085	$43,168	$47,223							**$35,631**
30 to 34	937	903	334	7						**2,181**
Average Pay	$32,460	$49,157	$52,565	$51,226						**$42,512**
35 to 39	885	938	922	236	4					**2,985**
Average Pay	$31,323	$50,544	$59,171	$59,796	$56,251					**$48,249**
40 to 44	683	890	934	845	181	3				**3,536**
Average Pay	$32,866	$50,116	$58,702	$63,686	$60,865	$73,030				**$52,865**
45 to 49	611	725	822	747	542	149	2			**3,598**
Average Pay	$33,730	$49,742	$57,709	$61,138	$65,874	$67,824	$56,095			**$54,392**
50 to 54	548	695	760	743	566	495	105	3		**3,915**
Average Pay	$32,866	$47,729	$56,699	$60,268	$62,209	$66,399	$64,777	$79,274		**$54,705**
55 to 59	512	650	722	672	513	503	297	107	3	**3,979**
Average Pay	$32,316	$46,976	$52,615	$55,559	$59,525	$62,071	$67,819	$69,778	$81,314	**$53,283**
60 to 64	410	583	639	650	471	398	270	237	109	**3,767**
Average Pay	$33,514	$46,426	$53,218	$54,000	$57,162	$59,526	$67,285	$70,600	$66,219	**$53,795**
65 to 69	180	267	334	301	173	152	115	92	82	**1,696**
Average Pay	$27,659	$49,091	$52,925	$58,298	$57,647	$61,511	$62,995	$66,419	$71,946	**$54,179**
70 & up	102	125	151	115	77	46	32	25	44	**717**
Average Pay	$26,538	$44,053	$55,339	$55,285	$60,871	$59,861	$63,813	$65,349	$63,944	**$51,405**
Total	**6,816**	**6,114**	**5,629**	**4,316**	**2,527**	**1,746**	**821**	**464**	**238**	**28,671**
Average Pay	**$31,498**	**$48,483**	**$56,141**	**$59,100**	**$61,051**	**$63,121**	**$66,394**	**$69,355**	**$67,962**	**$50,558**

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