Oklahoma Public Employees Retirement System

COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR THE FISCAL YEARS ENDED JUNE 30, 2021 AND JUNE 30, 2020

A Component Unit of the State of Oklahoma

Two words describe this past year: *APART. TOGETHER.*

Fiscal year 2021 was extraordinary. Challenges and disruptions seemed to be the norm. Being apart for extended periods of time was one challenge to be expected. We were APART from what we knew to be familiar. APART from our office space, our colleagues and the Oklahoma citizens we serve. Staff began working from home in early 2020 and continued to thrive at a high level. However, all across the state, people were missing the ability to gather and connect. OPERS staff met these challenges and shifted to a new way of working to provide services without interruption. Although APART, we still found ways to be TOGETHER.

Like other state employees, OPERS staff did not stop or slow down. We adapted to new methods of delivering services to our members. Technology allowed staff to remain highly engaged and connected with our members. OPERS remained strong and committed to our members. All while keeping our eye on the end goal of providing continuous, sound retirement services. In short, it brought us TOGETHER.

The information contained in this report represents a financial summary during a year that despite being APART, we continued to remain focused on what brings us TOGETHER: *providing a secure retirement benefit for a lifetime.*

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.

2021 COMPREHENSIVE ANNUAL FINANCIAL REPORT

TABLE OF CONTENTS

INTRODUCTORY SECTION

FINANCIAL SECTION

Financial Statements:

Required Supplementary Information:

Supplementary Information:

INVESTMENT SECTION

ACTUARIAL SECTION

STATISTICAL SECTION

2021

TOGETHER

In a year unlike most, virtual teamwork and problem-solving brought people TOGETHER with great results. The combined efforts of many binds us TOGETHER and is more valuable than what keeps us APART.

INTRODUCTION

APART

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 18, 2021

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, 2021.

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, 2021, 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 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. 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 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 association. 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 a like character and 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 their beneficiaries with a goal of keeping administrative expenses as low as possible. The Board has established an investment policy and guidelines that identify asset allocation as the key determinant of return and diversification, both by and within asset classes, as the primary risk control element. Passive fund portfolios 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 fund and two international equity index funds.

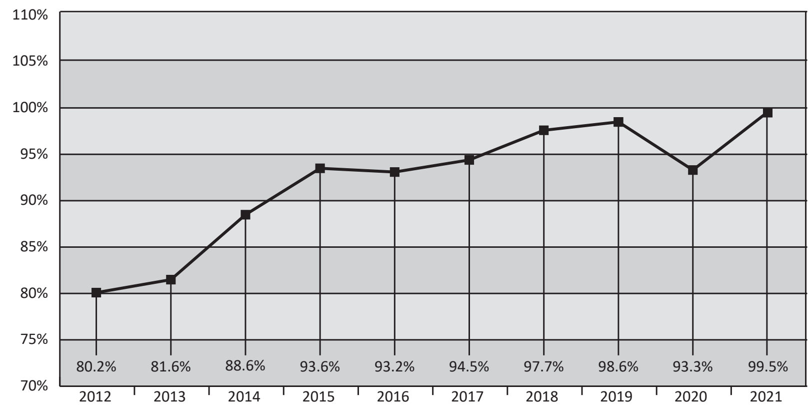
Included in the Investment Section of this report are a summary of the Investment Portfolio by Type and Manager and a comparison of the above amounts to the target allocations, as shown in the Asset Comparison chart. For fiscal year 2021 investments provided a 28 percent rate of return. The annualized rate of return for OPERS was 12.5 percent over the last three years and 11.7 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, 2021 amounted to $11.0 billion and $11.0 billion respectively.

Funded Ratio Chart

As of July 1



The OPERS funded status increased to 99.5 percent at July 1, 2021. In 2011, the funded ration 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 state employee contribution rate has been 3.5 percent of salary since July 1, 2006. Non state agency employers also had a rate increase effective July 1, 2006. The combined employee and employer contribution rate was 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.

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 financial report for the fiscal year ended June 30, 2020. This was the twenty-fourth 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 comprehensive annual 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 comprehensive annual 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	Brian Wolf
Executive Director	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 18, 2021

Dear OPERS Members:

On behalf of the Board of Trustees of the Oklahoma Public Employees Retirement System (OPERS), I am pleased to present the Comprehensive Annual Financial Report for the fiscal year ending June 30, 2021.

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,

Dana Webb
Chairperson

BOARD OF TRUSTEES

Dana Webb, Chair
Administrator,
Human Capital Management,
Office of Management and
Enterprise Services

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Member of Tax Commission
selected by Commission

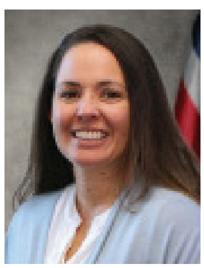
Bob Anthony
Corporation Commissioner

Jari Askins
Appointee, Supreme Court

Quyen Do
Appointee, Speaker of the
House of Representatives

John Hastings
Appointee, Governor

Don Kilpatrick
Appointee, President Pro
Tempore of the Senate

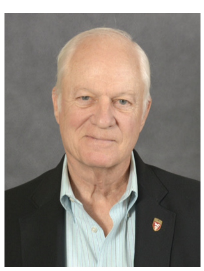


Brandy Manek
Designee, Director of the
Office of Management and
Enterprise Services

Randy McDaniel
State Treasurer

Grace McMillan
Appointee, Governor

Glen Mulready
State Insurance
Commissioner

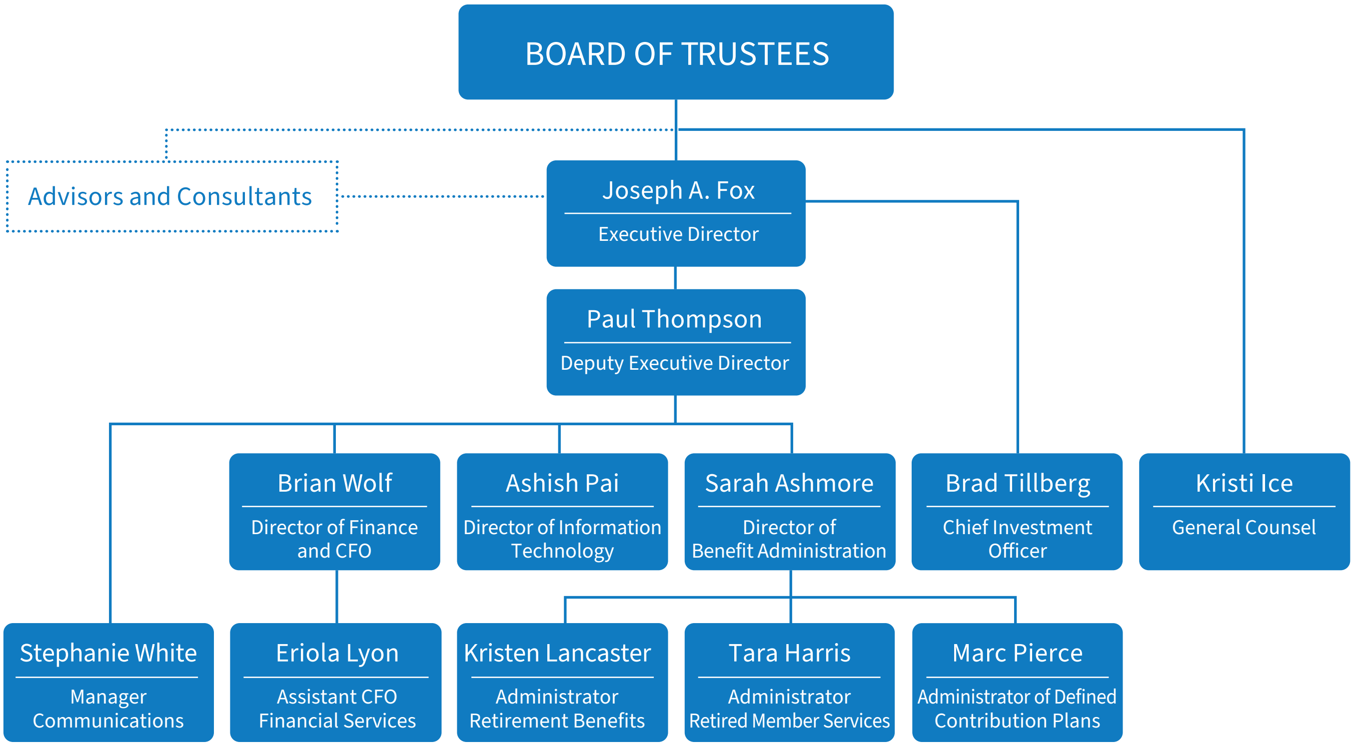


Edward Peterson
Appointee, President Pro
Tempore of the Senate

Tracey Ritz
Appointee, Speaker of the
House of Representatives

Grant Soderberg
Appointee, Governor

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 56 and 58, respectively) in the Financial Section and the Schedule of Stock Brokerage Commissions Paid (page 75) 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 Comprehensive Annual
Financial Report
For the Fiscal Year Ended

June 30, 2020

Christopher P. Morrill

Executive Director/CEO

Public Pension Coordinating Council

Public Pension Standards Award For Funding and Administration 2021

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

TOGETHER

Whether far APART or close TOGETHER, dedication, adaptation and boldness characterized this year. The Financial Section reflects the strength of our financial strategy to assist our members in reaching financial security in retirement.

FINANCIAL

APART

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CPAs & BUSINESS ADVISORS

Independent Auditor's Report

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

Report on the Financial Statements
We have audited the accompanying financial statements of the pension and health insurance subsidy plan (HISP) funds of the Oklahoma Public Employees Retirement System (the System), a component unit of the State of Oklahoma, which comprise the statements of fiduciary net position as of June 30, 2021 and 2020, and the related statements of changes in fiduciary net position, for the years then ended, and the related notes to the financial statements.

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

Auditor's Responsibility
Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

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

Opinions
In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Oklahoma Public Employees Retirement System, as of June 30, 2021 and 2020, and the respective statements of changes in fiduciary net position thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter
As discussed in Note 1, the financial statements of the Oklahoma Public Employees Retirement System, are intended to present the fiduciary net position, and the changes in fiduciary net position of only that portion of the System. They do not purport to, and do not, present fairly the fiduciary net position of other Plans governed by the Oklahoma Public Employee Retirement System Board of Trustees, as of June 30, 2021 and 2020, and the changes in its fiduciary net position for the years then ended, in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matters
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 Information
Our audit was 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.

Eide Bailly LLP

Oklahoma City, Oklahoma
October 13, 2021

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, 2021, 2020, and 2019.

Financial Highlights

- The net position restricted for pension and health insurance subsidy plan (HISP) totaled slightly over $12.5 billion at June 30, 2021 comparable to the position at June 30, 2020, improving by approximately $2.5 billion due to investment income and flows of funds, and $9.9 billion at June 30, 2019. 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 performed significantly well during fiscal year (FY) 2021, resulting in an increase in net investment income which lead to an increase in net position restricted for pension/HISP benefits from June 30, 2020 to June 30, 2021 contrary to the prior year where Fixed Income made the most impact from June 30, 2019 to June 30, 2020.
- At June 30, 2021, 2020, and 2019, the total number of members participating in the System decreased 1.6%, decreased 1.5% and decreased 1.4%, respectively. Membership was 74,195 at June 30, 2021, 75,376 at June 30, 2020, and 76,511 at June 30, 2019. The number of retirees increased by 0.5% as of June 30, 2021, increased by 0.9% as of June 30, 2020, and increased by 1.7% as of June 30, 2019. The total number of retirees was 36,351 at June 30, 2021, 36,179 at June 30, 2020, and 35,869 at June 30, 2019.

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.

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, 2021 and 2020. 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.*

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, 2021, 2020 and 2019.

Condensed Schedules of Fiduciary Net Position

($ millions)	2021			2020			2019		
	Pension	HISP	Combined	Pension	HISP	Combined	Pension	HISP	Combined
Assets:									
Cash and cash equivalents	$ 511.7	$ 11.6	$ 523.3	$ 299.2	$ 9.4	$ 308.6	$ 127.3	$ 6.9	$ 134.2
Receivables	543.5	20.8	564.3	258.8	9.9	268.7	322.1	11.9	334.0
Investments	12,064.2	466.3	12,530.5	9,632.5	374.1	10,006.6	9,489.1	354.0	9,843.1
Securities lending collateral	580.4	22.4	602.8	411.2	16.0	427.2	462.9	17.3	480.2
Other assets	0.8	0.1	0.9	1.0	0.1	1.1	1.0	-	1.0
Total assets	13,700.6	521.2	14,221.8	10,602.7	409.5	11,012.2	10,402.4	390.1	10,792.5
Liabilities:									
Other liabilities	1,052.5	40.7	1,093.2	469.0	18.2	487.2	346.4	12.9	359.3
Securities lending collateral	580.4	22.4	602.8	411.2	16.0	427.2	462.9	17.3	480.2
Total liabilities	1,632.9	63.1	1,696.0	880.2	34.2	914.4	809.3	30.2	839.5
Ending fiduciary net position	$ 12,067.7	$ 458.1	$ 12,525.8	$ 9,722.5	$ 375.3	$ 10,097.8	$ 9,593.1	$ 359.9	$ 9,953.0

Condensed Schedules of Changes in Fiduciary Net Position

($ millions)	2021			2020			2019		
	Pension	HISP	Combined	Pension	HISP	Combined	Pension	HISP	Combined
Member contributions	$ 66.2	$ -	$ 66.2	$ 67.8	$ -	$ 67.8	$ 66.6	$ -	$ 66.6
State and local agency contributions	275.3	17.7	293.0	274.9	19.2	294.1	263.7	18.8	282.5
Net investment income	2,681.3	83.0	2,764.3	435.3	14.5	449.8	544.2	18.8	563.0
Total additions	3,022.8	100.7	3,123.5	778.0	33.7	811.7	874.5	37.6	912.1
Retirement, death and survivor benefits	661.6	17.7	679.3	628.7	18.1	646.8	621.4	18.6	640.0
Refunds and withdrawals	10.7	-	10.7	14.4	-	14.4	15.4	-	15.4
Administrative expenses	5.3	0.2	5.5	5.5	0.2	5.7	5.6	0.2	5.8
Total deductions	677.6	17.9	695.5	648.6	18.3	666.9	642.4	18.8	661.2
Net increase in fiduciary net position	2,345.2	82.8	2,428.0	129.4	15.4	144.8	232.1	18.8	250.9
Beginning of year	9,722.5	375.3	10,097.8	9,593.1	359.9	9,953.0	9,361.0	341.1	9,702.1
End of year	$ 12,067.7	$ 458.1	$ 12,525.8	$ 9,722.5	$ 375.3	$ 10,097.8	$ 9,593.1	$ 359.9	$ 9,953.0

For the year ended June 30, 2021, fiduciary net position increased by $2,428.0 million, or 24.0%, from June 30, 2020. Total assets increased $3,209.6 million, or 29.1%, due to a 25.2% increase in investments change in fair value and 41.1% increase in Securities lending collateral. The System achieved a rate of return of 28.0% which is considerably higher than the prior year of 4.7%*. Total liabilities increased $781.6 million, or 85.5%, due to a 124.4% increase in pending purchases of securities.

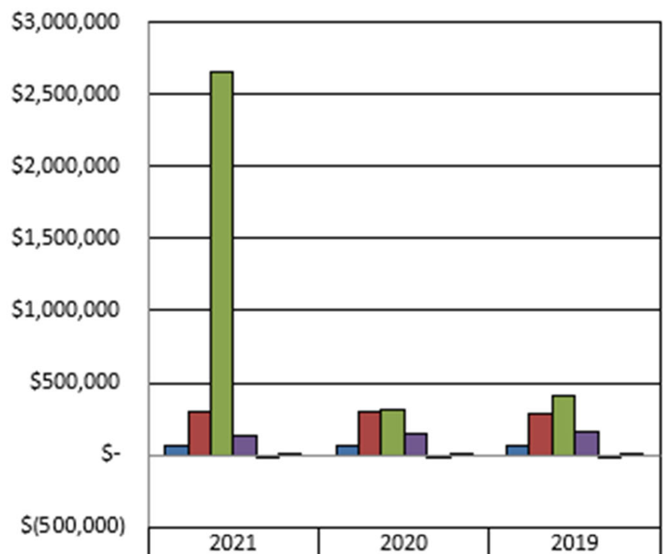
** Certain reclassification of amounts previously reported have been made to the accompanying financial statements to maintain consistency between periods presented. The investment return of the Fund for fiscal year 2020, gross of fees, was revised to 4.7% from the reported amount of 4.5%. The revision was the result of an error made in the calculation of the investment return by the System's custody bank during the period. The revision in the total return reported by the System for the period had no impact on fiduciary net position.*

Fiscal year 2021 resulted in a $2,311.8 million increase in total additions and a $28.6 million increase in total deductions. Compared to the prior year, the increase in additions was primarily due to an increase of $2,314.5 million in net investment income. Deductions increased 4.3% due to a $32.5 million increase in retirement, death, and survivor benefits.

Additions to Fiduciary Net Position

For the year ended June 30, 2021, total additions to fiduciary net position increased $2,311.8 million from the prior year. The net increase in net investment income of $2,314.5 million was the result of a much stronger market in 2021 than in the prior year. Interest income decreased $20.2 million, or 24.3%, and dividend income decreased $3.7 million, or 5.6%. Securities lending net income decreased $0.6 million or 28.2%. Contributions were $2.7 million, or 0.7% lower than the prior year due to a decrease in contributions.

Additions to Fiduciary Net Position
Comparative Data for Fiscal Years Ended June 30, 2021, 2020 and 2019
($ thousands)



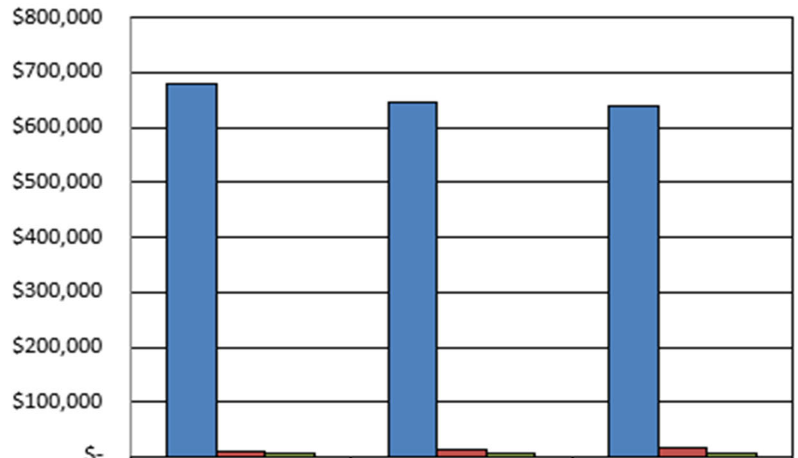
	2021	2020	2019
Member contributions	$66,204	$67,808	$66,566
State and local agency contributions	293,019	294,118	282,474
Net appreciation	2,655,094	311,353	414,354
Interest, dividends, and other investment income	126,632	151,187	160,302
Investment expenses	(18,789)	(14,681)	(13,783)
Securities lending income	1,414	1,970	2,205

For the year ended June 30, 2020, total additions to fiduciary net position decreased $100.4 million from the prior year. The net decrease in net appreciation of the fair value of investments of $103.0 million was the result of a weaker market in 2020. Interest income decreased $5.2 million, or 5.9%, and dividend income decreased $4.3 million, or 6.0%. Securities lending net income decreased $0.2 million or 10.7%. Contributions were $12.9 million, or 3.7% higher than the prior year due to the Pathfinder excess contribution for define contribution plan.

Deductions to Fiduciary Net Position

For the year ended June 30, 2021, total deductions on the following page increased $28.6 million, or 4.3%, from the prior year. Retirement, death, and survivor benefits increased $32.5 million, or 5.0%, due to a 0.5% increase in the number of retirees at year end and a 1.4% increase in the average benefit. Refunds and withdrawals decreased $3.7 million, or 25.7%, from prior year followed by a 4.4% decrease in administrative costs.

Deductions to Fiduciary Net Position
Comparative Data for Fiscal Years Ended June 30, 2021, 2020 and 2019
($ thousands)



	2021	2020	2019
Retirement, death and survivor benefits	$679,281	$646,840	$639,965
Refunds and withdrawals	10,733	14,452	15,369
Administrative expenses	5,475	5,726	5,755

For the year ended June 30, 2020, total deductions increased $5.9 million, or 0.9%, from the prior year. Retirement, death, and survivor benefits increased $6.8 million, or 1.1%, due to a 0.9% increase in the number of retirees at year end and a 4.6% increase in the average benefit. Refunds and withdrawals decreased $1.0 million, or 6.0%, from prior year followed by a 0.5% decrease 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.

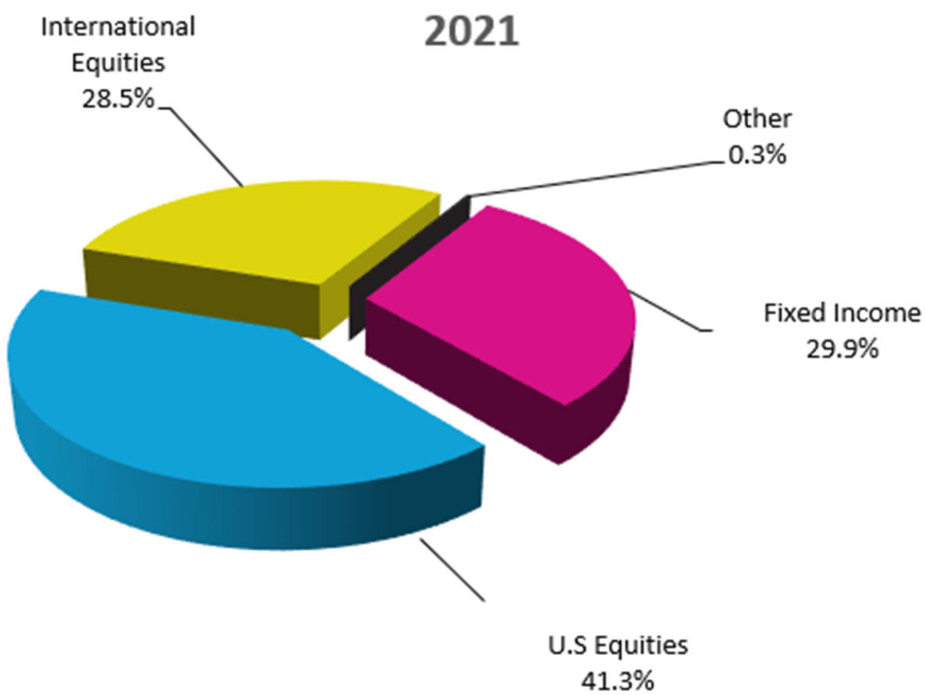
A summary of the System's cash, cash equivalents, and investments for fiscal years ended June 30, 2021, 2020 and 2019 is as follows:

Cash, Cash Equivalents, and Investment Portfolio

($ millions)	June 30,		
	2021	**2020**	**2019**
Fixed income	$ 4,280.3	$ 3,593.3	$ 3,175.0
U.S. equities	5,167.6	4,032.7	4,030.2
International equities	3,559.6	2,650.2	2,739.0
Other	33.5	23.8	17.8
Total managed investments	13,041.0	10,300.0	9,962.0
Cash equivalents on deposit with State	3.5	5.0	3.5
Real estate	9.3	10.2	11.8
Securities lending collateral	602.8	427.2	480.2
Total cash, cash equivalents, and investments	$ 13,656.6	$10,742.4	$ 10,457.5

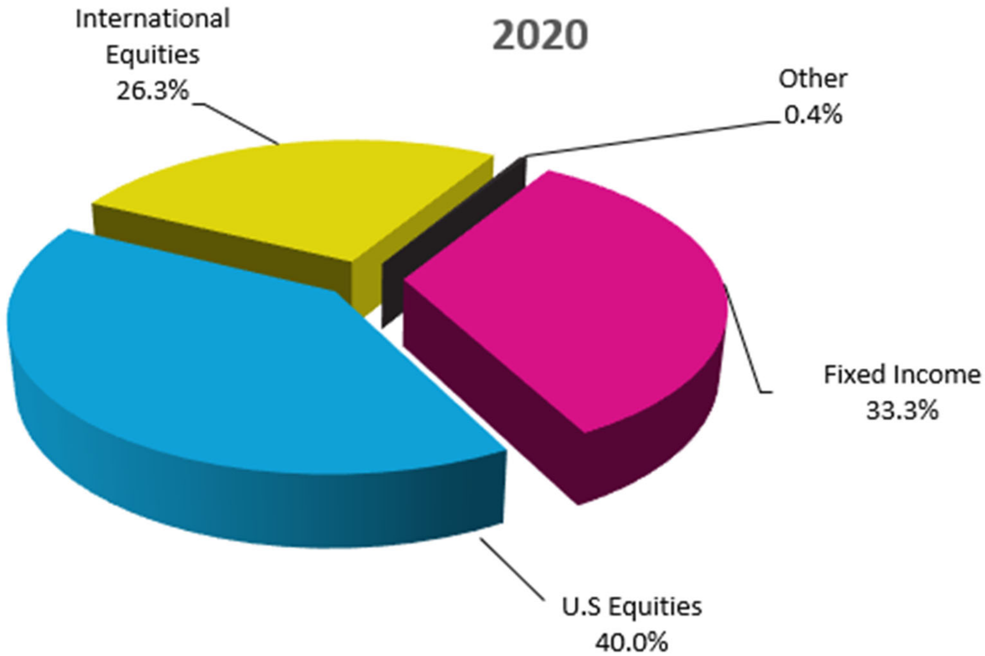
The 2021 increase in the System's managed investments is reflective of the increase in domestic and international income markets for the year. The System's overall return for the year ended June 30, 2021 was 28.0%. U.S. equities showed a significant return of 46.0%, followed by a strong international equity with a return of 36.9%. Fixed income showed a return of 0.1%. 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.

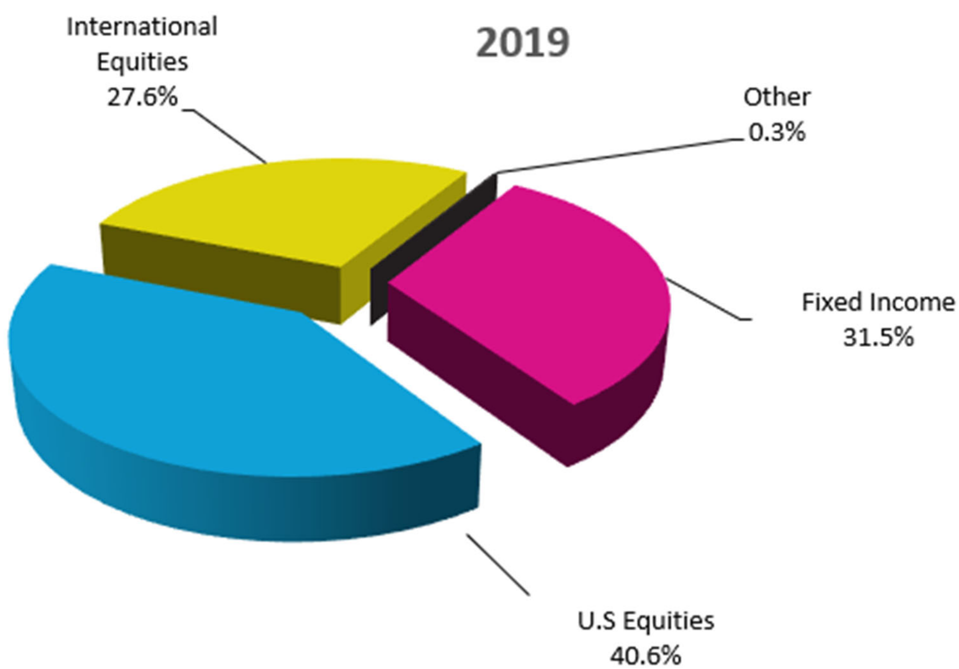
As of June 30, 2021, the distribution of the System's investments including accrued income and pending trades was as follows:



The 2020 increase in the System's managed investments is reflective of the increase in domestic and fixed income markets for the year. The System's overall return for the year ended June 30, 2020 was 4.7%. U.S. equities showed a return of 3.8%, and international equities showed a negative return of 3.2%. Fixed income showed a return of 11.7%. An amount of $309 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.

At June 30, 2020 and 2019, the distribution of the System's investments including accrued income and pending trades was as follows:





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, 2021	June 30, 2020	June 30, 2019
Total pension liability	$ 10,725,571,917	$ 10,614,647,291	$ 9,726,326,176
Plan fiduciary net position	$ 12,067,732,648	$ 9,722,484,043	$ 9,593,138,099
Ratio of fiduciary net position to total pension liability	112.51%	91.59%	98.63%

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

	June 30, 2021	June 30, 2020	June 30, 2019
Total HISP liability	$ 320,668,249	$ 328,431,762	$ 321,048,037
Plan fiduciary net position	$ 458,150,586	$ 375,314,784	$ 359,922,778
Ratio of fiduciary net position to total HISP liability	142.87%	114.27%	112.11%

The actuarial assumptions used in the July 1, 2021, valuation are based on the results of the most recent actuarial experience study, which covered the three-year period ending June 30, 2019.

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, 2021

	Pension Plan	Health Insurance Subsidy Plan	Combined
Assets			
Cash equivalents	$ 511,657,514	$ 11,637,038	$ 523,294,552
Receivables:			
Member contributions	4,345,399	-	4,345,399
State and local agency contributions	15,057,774	582,046	15,639,820
Due from brokers for securities sold	505,165,463	19,526,371	524,691,834
Accrued interest and dividends	18,981,650	733,717	19,715,367
Total receivables	543,550,286	20,842,134	564,392,420
Investments, at fair value:			
Short-term investments	38,499,074	1,488,132	39,987,206
Government obligations	2,684,810,439	103,777,045	2,788,587,484
Corporate bonds	971,242,583	37,541,833	1,008,784,416
Domestic equities	4,920,684,197	190,201,008	5,110,885,205
International equities	3,440,019,452	132,968,436	3,572,987,888
Real estate	8,939,448	345,552	9,285,000
Securities lending collateral	580,360,230	22,432,880	602,793,110
Total investments	12,644,555,423	488,754,886	13,133,310,309
Other assets	816,517	31,585	848,102
Total assets	13,700,579,740	521,265,643	14,221,845,383
Liabilities			
Due to brokers and investment managers	1,052,486,862	40,682,177	1,093,169,039
Securities lending collateral	580,360,230	22,432,880	602,793,110
Total liabilities	1,632,847,092	63,115,057	1,695,962,149
Net position restricted for pension/HISP benefits	$ 12,067,732,648	$ 458,150,586	$ 12,525,883,234

See accompanying notes to financial statements.

Statements of Fiduciary Net Position

As of June 30, 2020

	Pension Plan	Health Insurance Subsidy Plan	Combined
Assets			
Cash equivalents	$ 299,166,810	$ 9,460,084	$ 308,626,894
Receivables:			
Member contributions	3,756,450	-	3,756,450
State and local agency contributions	12,970,364	503,776	13,474,140
Due from brokers for securities sold	221,716,864	8,611,466	230,328,330
Accrued interest and dividends	20,302,265	788,546	21,090,811
Total receivables	258,745,943	9,903,788	268,649,731
Investments, at fair value:			
Short-term investments	2,214,323	86,013	2,300,336
Government obligations	2,098,234,739	81,495,214	2,179,729,953
Corporate bonds	1,124,815,735	43,687,727	1,168,503,462
Domestic equities	3,851,306,555	149,584,228	4,000,890,783
International equities	2,546,136,769	98,891,679	2,645,028,448
Real estate	9,780,132	379,868	10,160,000
Securities lending collateral	411,192,745	15,970,672	427,163,417
Total investments	10,043,680,998	390,095,401	10,433,776,399
Other assets	1,093,130	42,475	1,135,605
Total assets	10,602,686,881	409,501,748	11,012,188,629
Liabilities			
Due to brokers and investment managers	469,010,093	18,216,292	487,226,385
Securities lending collateral	411,192,745	15,970,672	427,163,417
Total liabilities	880,202,838	34,186,964	914,389,802
Net position restricted for pension/HISP benefits	$ 9,722,484,043	$ 375,314,784	$ 10,097,798,827

See accompanying notes to financial statements.

Statements of Changes in Fiduciary Net Position

As of June 30, 2021

	Pension Plan	Health Insurance Subsidy Plan	Combined
Additions			
Contributions:			
Members	$ 66,204,166	$ -	$ 66,204,166
State and local agencies	275,342,730	17,676,000	293,018,730
Total contributions	341,546,896	17,676,000	359,222,896
Investment income:			
From investing activities:			
Net appreciation in fair value of investments	2,575,406,922	79,686,626	2,655,093,548
Interest	60,962,267	1,945,086	62,907,353
Dividends	61,486,443	1,902,475	63,388,918
Real estate	325,514	10,072	335,586
Total investment income	2,698,181,146	83,544,259	2,781,725,405
Less – Investment expenses	(18,225,569)	(563,924)	(18,789,493)
Income from investing activities	2,679,955,577	82,980,335	2,762,935,912
From securities lending activities:			
Securities lending income	1,265,359	39,152	1,304,511
Securities lending expenses:			
Borrower rebates	347,670	10,757	358,427
Management fees	(241,675)	(7,478)	(249,153)
Income from securities lending activities	1,371,354	42,431	1,413,785
Net investment income	2,681,326,931	83,022,766	2,764,349,697
Total additions	3,022,873,827	100,698,766	3,123,572,593
Deductions			
Retirement, death and survivor benefits	661,582,309	17,698,655	679,280,964
Refunds and withdrawals	10,732,584	-	10,732,584
Administrative expenses	5,310,329	164,309	5,474,638
Total deductions	677,625,222	17,862,964	695,488,186
Net increase in net position	2,345,248,605	82,835,802	2,428,084,407
Net position restricted for pension/HISP benefits			
Beginning of year	9,722,484,043	375,314,784	10,097,798,827
End of year	$ 12,067,732,648	$ 458,150,586	$ 12,525,883,234

See accompanying notes to financial statements.

Statements of Changes in Fiduciary Net Position

As of June 30, 2020

	Pension Plan	Health Insurance Subsidy Plan	Combined
Additions			
Contributions:			
Members	$ 67,808,024	$ -	$ 67,808,024
State and local agencies	274,882,022	19,236,000	294,118,022
Total contributions	342,690,046	19,236,000	361,926,046
Investment income:			
From investing activities:			
Net appreciation in fair value of investments	301,404,584	9,948,808	311,353,392
Interest	80,337,085	2,792,311	83,129,396
Dividends	64,981,009	2,144,903	67,125,912
Real estate	901,980	29,773	931,753
Total investment income	447,624,658	14,915,795	462,540,453
Less – Investment expenses	(14,211,952)	(469,110)	(14,681,062)
Income from investing activities	433,412,706	14,446,685	447,859,391
From securities lending activities:			
Securities lending income	7,317,498	241,537	7,559,035
Securities lending expenses:			
Borrower rebates	(5,073,920)	(167,481)	(5,241,401)
Management fees	(336,214)	(11,098)	(347,312)
Income from securities lending activities	1,907,364	62,958	1,970,322
Net investment income	435,320,070	14,509,643	449,829,713
Total additions	778,010,116	33,745,643	811,755,759
Deductions			
Retirement, death and survivor benefits	628,669,618	18,170,671	646,840,289
Refunds and withdrawals	14,451,508	-	14,451,508
Administrative expenses	5,543,046	182,966	5,726,012
Total deductions	648,664,172	18,353,637	667,017,809
Net increase in net position	129,345,944	15,392,006	144,737,950
Net position restricted for pension/HISP benefits			
Beginning of year	9,593,138,099	359,922,778	9,953,060,877
End of year	$ 9,722,484,043	$ 375,314,784	$ 10,097,798,827

See accompanying notes to financial statements.

Notes to Financial Statements
June 30, 2021 and 2020

(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 includes net appreciation 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 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)

(f) Adoption of New Accounting Standard

During fiscal year 2021, the System implemented GASB 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans, an amendment of GASB Statements No. 14 and No. 84*. The System has applied the new accounting policy utilizing a retrospective approach. Due to the adoption of the GASB 97, it mitigated the effects of GASB 84, and therefore the standard had minimal impact on the previously issued financial statements.

(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:

	2021	2020
Inactive members or their beneficiaries currently receiving benefits	36,351	36,179
Inactive members entitled to but not yet receiving benefits	6,133	6,082
Active members	31,711	33,115
Total	74,195	75,376

Of the inactive members or their beneficiaries currently receiving benefits 13,820 and 14,172 are retirees and beneficiaries in the HISP as of June 30, 2021 and 2021, respectively. The Plan also includes 57,140 and 55,874 nonvested terminated members entitled to a refund of their member contributions as of June 30, 2021 and 2020, 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, 2021 and 2020 totaled approximately $6,446,000 and $5,853,000, 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 2021 and 2020, *state agency employers* contributed 16.5% on all salary, and *state employees* contributed 3.5% on all salary.

For 2021 and 2020, 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 2021 and 2020, 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:

	2021	2020
State agencies	117	117
County governments	75	75
Local government towns and cities	29	29
Other local governmental units	66	63
Total	287	284

(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%. 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:

	2021	2020
Cash equivalents		
State Treasurer	$ 3,544,905	$ 5,041,033
Custodial agent	518,267,631	301,807,274
Foreign currency	1,482,016	1,778,587
Total cash and cash equivalents	$ 523,294,552	$308,626,894

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, 2021 and 2020, 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, 2021 and 2020, the foreign currency holdings were $1,482,016 and $1,778,587, 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, 2021 and 2020, 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:

	2021	2020
U.S. Treasury notes/bonds	$ 1,459,778,749	$ 930,990,645
U.S. TIPS index fund	426,092,846	352,275,062
Government agencies	11,950,913	12,702,125
Government mortgage-backed securities	860,734,999	829,136,215
Foreign bonds	22,917,093	26,250,320
Municipal bonds	7,112,883	28,375,586
Corporate bonds	811,311,063	908,409,819
Asset-backed securities	114,682,690	128,359,824
Commercial mortgage-backed securities	80,790,022	75,843,412
Non government backed collateralized mortgage obligations	41,435,432	58,190,981
Other fixed income	551,758	-
Domestic equities	2,574,880,397	2,301,103,393
U.S. equity index fund	2,536,004,809	1,699,787,390
International equities	1,166,458,502	924,316,737
International equity index funds	2,406,530,043	1,720,711,473
Real estate	9,285,000	10,160,000
Securities lending collateral	602,793,110	427,163,417
Total investments	$ 13,133,310,309	$ 10,433,776,399

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, 2021 and 2020, 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 2021 and 2020, 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, 2021 and 2020, 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 $602,793,110 and $445,198,311 in FY2021 and $427,163,417 and $339,900,424 in FY2020.
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	2021	%	2020	%
Collateralized by Cash Collateral	$ 588,592,321	58%	$ 419,324,064	56%
Collateralized by non- Cash Collateral	433,335,692	42%	332,109,627	44%
Total	$ 1,021,928,013	100%	$ 751,433,691	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. At June 30, 2021 and 2020, the cash collateral investments had an average weighted maturity of 31 and 26 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, 2021, 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 $15,770,097 in issues rated below triple-B minus, and the core plus fixed income portfolio, which held $23,116,211 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, 2020, 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 $2,795,948 in issues rated below triple-B minus, and the core plus fixed income portfolio, which held $22,979,938 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, 2021, the System held 41.9% of fixed income investments that were not considered to have credit risk and 11.1% in a U.S. TIPS index fund made up of explicitly guaranteed U.S. Treasury Inflation-Protected Securities. At June 30, 2020, the System held 28.8% of fixed income investments that were not considered to have credit risk and 10.5% 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, 2021 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	Not Rated or Rating Not Available	Total
Government agencies	$ -	$ -	$ -	$ 3,999	$ 827	$ -	$ -	$ -	$ 4,826
Municipal bonds	512	5,736	360	505	-	-	-	-	7,113
Foreign government bonds	-	-	1,284	16,301	5,331	-	-	-	22,916
Corporate bonds	1,003	21,799	203,135	503,150	34,381	5,214	2,108	524	771,314
Asset-backed securities	90,568	9,803	4,590	-	69	7,348	2,305	-	114,683
Commercial mortgage-backed securities	72,356	4,670	512	-	826	-	-	2,425	80,789
Non government backed collateralized mortgage obligations	17,052	5,204	4,460	3,977	3,482	4,117	3,144	-	41,436
Other Fixed Income	-	-	552	-	-	-	-	-	552
Total fixed income securities exposed to credit risk	$ 181,491	$ 47,212	$ 214,893	$ 527,932	$ 44,916	$ 16,679	$ 7,557	$ 2,949	$ 1,043,629
Percent of total fixed income portfolio	4.7%	1.2%	5.6%	13.8%	1.2%	0.4%	0.2%	0.1%	27.2%

The System's exposure to credit risk at June 30, 2020 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	$ 395	$ -	$ -	$ 3,435	$ -	$ -	$ -	$ -	$ -	$ 3,830
Municipal bonds	9,949	12,828	2,582	3,017	-	-	-	-	-	28,376
Foreign government bonds	-	-	571	25,679	-	-	-	-	-	26,250
Corporate bonds	4,295	41,779	319,490	507,277	29,095	6,087	349	-	38	908,410
Asset-backed securities	93,777	14,414	9,476	-	72	7,078	3,475	68	-	128,360
Commercial mortgage-backed securities	68,630	3,092	2,005	713	-	-	-	-	1,403	75,843
Non government backed collateralized mortgage obligations	32,449	8,188	4,557	128	6,396	2,712	3,667	-	94	58,191
Total fixed income securities exposed to credit risk	$209,495	$80,301	$338,681	$540,249	$35,563	$15,877	$7,491	$68	$1,535	$ 1,229,260
Percent of total fixed income portfolio	6.3%	2.4%	10.1%	16.1%	1.1%	0.5%	0.2%	0.0%	0.0%	36.7%

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, 2021 and 2020.

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, 2021, and 2020, 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.

	2021		2020	
	Fair Value	**Effective duration in years**	**Fair Value**	**Effective duration in years**
U.S. Treasury notes/bonds	$ 1,459,778,749	10.4	$ 930,990,407	13.7
U.S. TIPS index fund	426,092,846	7.5	352,275,062	7.7
Government agencies	11,950,913	8.0	12,702,125	9.0
Government mortgage-backed securities	860,734,999	3.8	829,136,215	4.2
Foreign bonds	22,917,093	8.8	26,250,320	8.9
Municipal bonds	7,112,883	15.5	28,375,586	11.2
Corporate bonds	811,311,063	7.4	908,409,819	7.3
Asset-backed securities	114,682,690	2.3	128,359,824	2.1
Commercial mortgage-backed securities	80,790,022	4.1	75,843,412	4.7
Non government backed collateralized mortgage obligations	41,435,432	2.4	58,190,981	3.1
Other fixed income	551,758	8.7	-	0.0
Total fixed income	$ 3,837,358,448		$ 3,350,533,751	
Portfolio duration		7.5		8.1

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, 2021 and 2020, the System held $114,682,690 and $128,359,824, respectively, in asset-backed securities.

Mortgage-backed securities are securities backed by mortgages issued by public and private institutions. At June 30, 2021 and 2020, the System held $860,734,999 and $829,136,215, 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 $80,790,022 and $75,843,412, 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, 2021 and 2020, the System held $41,435,432 and $58,190,981, 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)	2021	2020
0 - 14	47.4 %	36.3 %
15 - 30	4.3	8.3
31 - 60	9.7	14.6
61 - 90	17.7	11.2
91 - 180	9.2	22.8
181 - 364	11.2	4.1
365 - 730	0.5	2.7
	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, 2021 is as follows:

Currency	Equities	Short-term Investments	Cash	Total	Percent
Australian dollar	$ 17,909,251	$ -	$ -	$ 17,909,251	0.5 %
Brazilian real	12,981,941	-	-	12,981,941	0.4
British pound sterling	172,403,608	(49,506)	87,770	172,441,872	4.8
Canadian dollar	8,579,678	-	-	8,579,678	0.2
Danish krone	7,742,299	-	-	7,742,299	0.2
Euro	255,418,097	(15,770)	15,770	255,418,097	7.1
Hong Kong dollar	138,708,225	328,814	26,618	139,063,657	3.9
Indonesian rupiah	3,152,027	-	-	3,152,027	0.1
Japanese yen	223,586,463	(133,345)	680,320	224,133,438	6.3
Mexican peso	4,449,580	-	-	4,449,580	0.1
Polish zloty	-	-	435	435	0.0
Singapore dollar	22,916,549	(103,082)	103,082	22,916,549	0.6
South African rand	7,073,870	-	-	7,073,870	0.2
South Korean won	35,844,897	-	-	35,844,897	1.0
Swedish krona	37,886,030	-	-	37,886,030	1.1
Swiss franc	20,433,378	-	-	20,433,378	0.6
International portfolio exposed to foreign currency risk	969,085,893	27,111	913,995	970,026,999	27.1
International portfolio in U.S. dollars	2,603,901,995	(26,455)	6,142,106	2,610,017,646	72.9
Total international portfolio	$ 3,572,987,888	$ 656	$ 7,056,101	$ 3,580,044,645	100.0 %

The System's exposure to foreign currency risk by asset class at June 30, 2020 is as follows:

Currency	Equities	Short-term Investments	Cash	Total	Percent
Australian dollar	$ 22,203,447	$ -	$ 126,465	$ 22,329,912	0.8 %
Brazilian real	9,896,498	-	-	9,896,498	0.4
British pound sterling	128,586,573	20,107	263,334	128,870,014	4.9
Canadian dollar	5,036,493	-	46,628	5,083,121	0.2
Danish krone	5,218,599	-	-	5,218,599	0.2
Euro	203,526,265	338,139	-	203,864,404	7.7
Hong Kong dollar	93,077,707	87,284	89,835	93,254,826	3.5
Indonesian rupiah	2,294,040	-	-	2,294,040	0.1
Japanese yen	193,567,136	321,027	637,815	194,525,978	7.3
Malaysian ringgit	600,517	-	-	600,517	0.0
Mexican peso	5,242,490	-	10,214	5,252,704	0.2
Polish zloty	-	-	418	418	0.0
Singapore dollar	22,829,050	(337,929)	603,878	23,094,999	0.9
South African rand	7,819,026	-	-	7,819,026	0.3
South Korean won	22,128,116	-	-	22,128,116	0.8
Swedish krona	33,293,271	-	-	33,293,271	1.3
Swiss franc	27,987,973	(25,762)	-	27,962,211	1.1
United Arab Emirates dirham	1,163,539	-	-	1,163,539	0.0
International portfolio exposed to foreign currency risk	784,470,740	402,866	1,778,587	786,652,193	29.6
International portfolio in U.S. dollars	1,860,557,708	(403,103)	10,099,257	1,870,253,862	70.4
Total international portfolio	$ 2,645,028,448	$ (237)	$ 11,877,844	$ 2,656,906,055	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, 2021 and 2020 were approximately $11.2 and $49.0 million, respectively.

Notes to Financial Statements (continued)

(f) Rate of Return

For the year ended June 30, 2021 and 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expenses, was 28.05% and 4.61% respectively, and the annual money-weighted rate of return on HISP plan investments, net of HISP plan investment expenses, was 22.10% and 4.03% 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, 2021 are as follows:

		Fair Value Measurements Using		
Investments by Fair Value Level	**6/30/2021**	**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	$ 512,693,547	$ -	$ 512,693,547	$ -
Debt Securities				
U.S. Treasury notes/bonds	1,459,778,749	-	1,459,778,749	-
Government agencies	11,950,913	-	11,950,913	-
Government mortgage-backed securities	860,734,999	-	860,734,999	-
Foreign bonds	22,917,093	-	22,917,093	-
Municipal bonds	7,112,883	-	7,112,883	-
Corporate bonds	811,311,063	-	811,311,063	-
Asset-backed securities	114,682,690	-	114,682,690	-
Commercial mortgage-backed securities	80,790,022	-	80,790,022	-
Non government backed collateralized mortgage obligations	41,435,432	-	41,435,432	-
Other fixed income	551,758	-	551,758	-
Total Debt Securities	3,411,265,602	-	3,411,265,602	-
Equity Securities				
International equities	1,166,458,502	1,166,458,502	-	-
U.S. common and preferred stock	2,574,880,397	2,574,880,397	-	-
Total Equity Securities	3,741,338,899	3,741,338,899	-	-
Real estate				
Real estate	9,285,000	-	-	9,285,000
Total Investments by Fair Value Level	$ 7,161,889,501	$ 3,741,338,899	$ 3,411,265,602	$ 9,285,000
Investments Measured at the Net Asset Value (NAV)				
U.S. TIPS index fund	$ 426,092,846			
International equity index funds	2,406,530,043			
U.S. equity index fund	2,536,004,809			
Total Investments Measured at NAV	5,368,627,698			
Securities lending collateral	602,793,110			
Total Investments	$ 13,133,310,309			

Notes to Financial Statements (continued)

Assets measured at fair value and net asset value on June 30, 2020 are as follows:

		Fair Value Measurements Using		
Investments by Fair Value Level	**6/30/2020**	**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	$ 291,708,017	$ -	$ 291,708,017	$ -
Debt Securities				
U.S. Treasury notes/bonds	930,990,645	-	930,990,645	-
Government agencies	12,702,125	-	12,702,125	-
Government mortgage-backed securities	829,136,215	-	829,136,215	-
Foreign bonds	26,250,320	-	26,250,320	-
Municipal bonds	28,375,586	-	28,375,586	-
Corporate bonds	908,409,819	-	908,409,819	-
Asset-backed securities	128,359,824	-	128,359,824	-
Commercial mortgage-backed securities	75,843,412	-	75,843,412	-
Non government backed collateralized mortgage obligations	58,190,981	-	58,190,981	-
Total Debt Securities	2,998,258,927	-	2,998,258,927	-
Equity Securities				
International equities	924,316,737	924,316,737	-	-
U.S. common and preferred stock	2,301,103,393	2,301,103,393	-	-
Total Equity Securities	3,225,420,130	3,225,420,130	-	-
Real estate				
Real estate	10,160,000	-	-	10,160,000
Total Investments by Fair Value Level	$ 6,233,839,057	$ 3,225,420,130	$ 2,998,258,927	$ 10,160,000
Investments Measured at the Net Asset Value (NAV)				
U.S. TIPS index fund	$ 352,275,062			
International equity index funds	1,720,711,473			
U.S. equity index fund	1,699,787,390			
Total Investments Measured at NAV	3,772,773,925			
Securities lending collateral	427,163,417			
Total Investments	$ 10,433,776,399			

There have been no significant changes in valuation techniques during the fiscal years ended June 30, 2021 and 2020.

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	**6/30/2021**	**6/30/2020**	**Redemption Frequency**	**Redemption Notice Period**
U.S. TIPS index fund (1)	$ 426,092,846	$ 352,275,062	Daily	2 days
International equity index funds (2)	2,406,530,043	1,720,711,473	Daily	2 days
U.S. equity index fund (3)	2,536,004,809	1,699,787,390	Daily	1 day
	$ 5,368,627,698	$ 3,772,773,925		

(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.

Notes to Financial Statements (continued)

(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:

	2021	2020
Total pension liability	$ 10,725,571,917	$ 10,614,647,291
Plan fiduciary net position	12,067,732,648	9,722,484,043
Employers' net pension (asset) liability	$ (1,342,160,731)	$ 892,163,248
Plan fiduciary net position as a percentage of the total pension liability	112.51%	91.59%

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

	2021	2020
Total HISP liability	$ 320,668,249	$ 328,431,762
HISP plan fiduciary net position	458,150,586	375,314,784
Employers' net HISP asset	$ (137,482,337)	$ (46,883,022)
Plan fiduciary net position as a percentage of the total HISP liability	142.87%	114.27%

Notes to Financial Statements (continued)

(b) Actuarial Methods and Assumptions

The total pension liability and total HISP liability, both as of June 30, 2021 and 2020, were determined based on actuarial valuations prepared as of July 1, 2021, using the following actuarial assumptions:

- Investment return – 6.50% for 2021 and 2020 compounded annually net of investment expense and including inflation
- Salary increases, including price inflation – 3.25% to 9.25% for 2021 and 2020
- Mortality rates – In 2021, 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 year.
- No annual post-retirement benefit increases
- Assumed inflation rate – 2.50% for 2021 and 2020
- Payroll growth – 3.25% for 2021 and 2020
- Actuarial cost method – Entry age
- Select period for the termination of employment assumptions – 10 years

The actuarial assumptions used in the July 1, 2021, valuation are based on the results of the most recent actuarial experience study, which covered the three-year period ending June 30, 2019. The experience study report is dated May 13, 2020.

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, 2019 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%	4.7%
U.S. Small Cap Equity	6.0%	5.8%
Int'l Developed Equity	23.0%	6.5%
Emerging Market Equity	5.0%	8.5%
Core Fixed Income	25.0%	0.5%
Long Term Treasuries	3.5%	0.0%
US TIPS	3.5%	0.3%
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 2021 and 2020. 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 2021 and 2020, 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, 2021			June 30, 2020		
	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 (asset) liability	$ (124,603,241)	$ (1,342,160,731)	$ (2,371,285,064)	$2,100,226,839	$ 892,163,248	$ (128,635,844)

The following presents the net HISP asset or liability of the employer calculated using the discount rate of 6.50% for 2021 and 2020 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, 2021			June 30, 2020		
	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 asset	$ (103,378,854)	$ (137,482,337)	$ (166,712,874)	$ (11,936,240)	$ (46,883,022)	$ (76,833,004)

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, 2021

Schedule 1

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

Year Ended June 30,	2021	2020	2019	2018	2017	2016	2015	2014
Total Pension Liability								
Service cost	$ 170,303	$ 158,748	$ 162,170	$ 170,490	$ 177,082	$ 178,523	$ 175,809	$ 184,835
Interest	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	(55,509)	(7,442)	(2,065)	(110,269)	(117,283)	(52,745)	(11,228)	(89,172)
Changes of assumptions	-	538,446	-	-	238,225	233,874	-	15,413
Benefit payments	(661,582)	(628,669)	(621,409)	(592,726)	(573,962)	(565,412)	(542,488)	(520,641)
Refunds of contributions	(10,733)	(14,452)	(15,369)	(15,957)	(15,950)	(15,862)	(15,611)	(14,878)
Net change in total pension liability	110,925	888,322	170,336	101,348	347,378	431,684	242,457	197,547
Total pension liability - beginning	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)	$ 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	$ 275,343	$ 274,882	$ 263,730	$ 258,907	$ 269,511	$ 296,249	$ 292,185	$ 280,047
Contributions - member	66,204	67,808	66,566	66,930	70,276	73,801	73,145	70,524
Net investment income	2,681,327	435,320	544,237	734,976	1,013,868	15,756	264,289	1,317,980
Benefit payments	(661,582)	(628,669)	(621,409)	(592,726)	(573,962)	(565,412)	(542,488)	(520,641)
Administrative expense	(5,310)	(5,543)	(5,564)	(5,162)	(5,214)	(5,395)	(5,183)	(4,709)
Refunds of contributions	(10,733)	(14,452)	(15,369)	(15,957)	(15,950)	(15,862)	(15,611)	(14,878)
Net change in plan fiduciary net position	2,345,249	129,346	232,191	446,968	758,529	(200,863)	66,337	1,128,323
Plan fiduciary net position - beginning	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)	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)	$ (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,	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	$ 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	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	$ (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	112.51%	91.59%	98.63%	97.96%	94.28%	89.48%	96.00%	97.90%
Covered payroll	$ 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	-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.

Discount Rate was 6.50% for FY2021 and FY2020.

Required Supplementary Information

Schedule of Pension Employer Contributions ($ in Thousands)
(Unaudited)
June 30, 2021
Schedule 2

Year Ended June 30,	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined employer contribution	$ 224,843	$ 118,083	$ 129,707	$ 168,494	$ 176,016	$ 164,600	$ 200,784	$ 258,879
Actual employer contributions	275,343	274,882	263,730	258,907	269,511	296,249	292,185	280,047
Annul contribution (excess)	$ (50,500)	$ (156,799)	$ (134,023)	$ (90,413)	$ (93,495)	$ (131,649)	$ (91,401)	$ (21,168)
Covered payroll*	$ 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*	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.

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.

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	7 years
Asset valuation method	5-year moving average
Inflation	2.50% for 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 2021 and 2020, 7.00% for 2019, 7.00% for 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 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. 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 years)

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, 2021

Schedule 3

Annual money-weighted rate of return, net of investment expense	
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%

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

(Unaudited)

June 30, 2021

Schedule 4

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

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

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

Year Ended June 30,	2021	2020	2019	2018	2017
Total HISP liability	$ 320,668	$ 328,432	$ 321,048	$ 328,143	$ 326,975
Plan fiduciary net position	458,150	375,315	359,923	341,084	315,521
Net HISP (asset) liability	$ (137,482)	$ (46,883)	$ (38,875)	$ (12,941)	$ 11,454
Ratio of plan fiduciary net position to total HISP (asset) liability	142.87%	114.27%	112.11%	103.94%	96.50%
Covered payroll*	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

*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.

Discount Rate was 6.50% for both 2021 and 2020.

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, 2021
Schedule 5

Year Ended June 30,	2021	2020	2019	2018	2017
Actuarially determined employer contribution	$ 6,722	$ 3,654	$ 4,281	$ 5,786	$ 6,087
Actual employer contributions	17,676	19,236	18,744	19,080	18,828
Annul contribution (excess)	$ (10,954)	$ (15,582)	$ (14,463)	$ (13,294)	$ (12,741)
Covered payroll*	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

*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	7 years
Asset valuation method	5-year moving average
Inflation	2.50% for 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 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 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 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, 2021

Schedule 6

Annual money-weighted rate of return, net of investment expense	
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, 2021 and 2020

Schedule 7

	2021	2020
Investment management fees		
Fixed Income Managers:		
BlackRock Financial Management, Inc.	$ 1,328,222	$ 1,269,944
Hoisington Investment Management	470,537	479,385
Metropolitan West Asset Management, LLC	2,041,729	1,394,567
BlackRock Institutional Trust Company, N.A. - TIPS	31,837	28,708
U.S. Equity Managers:		
Barrow, Hanley, Mewhinney & Strauss, Inc.	1,265,195	1,022,527
BlackRock Institutional Trust Company, N.A.	139,137	124,488
DePrince Race & Zollo, Inc.	730,517	792,552
Mellon Capital Management	62,500	125,000
State Street Global Advisors	195,887	163,012
UBS Global Asset Management	4,197,708	3,097,778
Westfield Capital Management	366,576	301,477
International Equity Managers:		
Baillie Gifford Overseas Limited	4,568,295	2,820,842
BlackRock Institutional Trust Company, N.A.	561,830	466,436
Mondrian Investment Partners, Ltd	2,307,293	2,072,691
Total investment management fees	18,267,263	14,159,408
Investment consultant fees		
Verus Investment Advisory Group	244,494	246,784
Investment custodial fees		
Northern Trust Company	37,595	42,272
Other investment related expenses	240,141	232,599
Total investment expenses	$ 18,789,493	$ 14,681,062

Supplementary Information

Schedule of Administrative Expenses

Year Ended June 30, 2021 and 2020

Schedule 8

	2021	2020
Staff salaries	$ 3,426,959	$ 3,519,717
Social Security	255,234	262,373
Retirement	594,769	611,938
Insurance	626,065	656,956
Temporary employees	249	2,690
Total personnel services	4,903,276	5,053,674
Actuarial	97,850	161,614
Audit	319,733	198,812
IT Consulting	172,340	183,593
Legal	13,766	14,094
Total professional services	603,689	558,113
Printing	42,842	53,961
Telephone	24,236	23,475
Postage and mailing expenses	87,950	89,052
Travel	9,493	37,148
Information Technology	265,471	334,596
Total communication	429,992	538,232
Office space	259,736	259,736
Equipment leasing	14,530	17,866
Total rentals	274,266	277,602
Supplies	5,340	15,362
Maintenance	56,280	49,940
Depreciation	70,385	72,373
Other	92,602	104,892
Total miscellaneous	224,607	242,567
Total administrative expenses	6,435,830	6,670,188
Administrative expenses allocated		
Uniform Retirement System for Justices and Judges (URSJJ)	(181,425)	(182,325)
Oklahoma State Employees Deferred Compensation Plan (DCP)	(485,311)	(507,542)
Oklahoma State Employees Deferred Savings Incentive Plan (SIP)	(125,968)	(136,603)
Pathfinder 401(a) Defined Contribution Plan	(149,339)	(105,380)
Pathfinder 457 Defined Contribution Plan	(19,149)	(12,326)
Total administrative expenses allocated	(961,192)	(944,176)
Net administrative expenses	$ 5,474,638	$ 5,726,012

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, 2021 and 2020

Schedule 9

		2021	2020
Professional/Consultant	**Service**		
Cavanaugh Macdonald Consulting, Inc.	Actuarial	$ 97,850	$ 161,614
Eide Bailly LLP	External Auditor	72,300	73,000
Arledge & Associates	External Auditor	40,000	38,250
Finley & Cook, PLLC	Internal Auditor	207,433	87,562
Gartner Inc.	IT Consulting	146,465	146,465
OMES - Communications	IT Consulting	-	11,253
True Digital Security	IT Consulting	25,875	25,875
Ice Miller LLP	Legal	13,666	13,715
Michael Mitchelson	Legal	100	300
Phillips Murrah, P.C.	Legal	-	79
Total professional/consultant fees		$ 603,689	$ 558,113

2021 TOGETHER

Nothing is more important than protecting the financial well-being of our investments. Working TOGETHER and delivering on the mission of serving public employees, we help ensure our members can have the best possible retirement.

INVESTMENT

Verus

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 4.4% for the fiscal year ended June 30, 2021. 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	6/30/21 ALLOCATION	LOW	TARGET	HIGH	% PASSIVE OR SEMI-PASSIVE
U.S. EQUITY	41.3%	40.9%	40.0%	43.7%	77.3%
FIXED INCOME	29.9%	27.2%	32.0%	31.9%	60.0%
INT'L EQUITY	28.5%	26.8%	28.0%	28.8%	67.5%
REAL ESTATE	0.1%	0.1%	0.0%	0.1%	0.0%
CASH	0.3%	0.2%	0.0%	0.3%	0.0%

Review of Fiscal Year 2021 Investment Environment

Market Environment
Two steps forward, one step back. Slow and bumpy improvement probably best describes the trajectory of the global economy over the last year. The faster-than-expected distribution of highly effective vaccines within the developed world paved the way for gradual reopening of developed economies, but emerging economies with less access to quality vaccines were less prepared to deal with the litany of more-virulent mutations and had to respond with more draconian social distancing controls to mitigate increases in case growth.

Risk-on sentiment propelled financial markets forward, backstopped by continued support from global central banks, the light at the end of the tunnel provided by vaccines, and the inclination of markets to shrug off big surprises on earnings and economic data. Expectations for a strong rebound in economic growth and inflation over the intermediate-term sparked a rotation from the growth sectors that had performed well through the crisis toward more value-oriented sectors prospectively positioned to outperform in a period of rising interest rates. This reflation trade thrived from around mid-August until mid-May but began to unravel late in the fiscal year as a result of concerns about the Delta Covid-19 variant impeding a full and swift global economic recovery, as well as a hawkish pivot from the Federal Reserve which reduced the likelihood of higher inflation and interest rates over the longer term. Looking ahead, the major questions investors are grappling with center around the staying power of high levels of inflation, the timeframe over which the Federal Reserve may begin to taper asset purchases, the outlook for fiscal stimulus, and the capability of companies to sustain high enough levels of earnings growth to justify elevated valuations.

U.S. Equity

Up and to the right has been the story for U.S. equity prices over the past year as investors largely looked through the shorter-term impact of pandemic-related shutdowns and bet that fiscal and monetary support would be able to build a bridge to a post-pandemic world. As of June 30th, 2020, the S&P 500 Index remained -8.4% beneath its previous high-water mark of 3386. By August 18th, the overall index had reached a fresh all-time high, and would proceed to close at record high levels in 53 of the 218 remaining trading days in the fiscal year, delivering a 40.8% total return along the way. Realized and implied volatility receded to levels more in line with longer-term historical averages. Since making its full recovery in August of 2020, the largest drawdown from prior peak levels suffered by the S&P 500 Index was -9.6%, and between November 4th 2020 and June 30th 2021, the index never closed further than 5% beneath its previous record high.

Corporate revenues began to recover over the year, and higher operating leverage ratios which resulted from a litany of cost-saving initiatives implemented during the pandemic worked to supercharge earnings growth. Per FactSet, the estimated year-over-year earnings growth for the S&P 500 Index as of Q2 2021 is 64.0%. If that rate were to materialize, it would mark the highest year-over-year rate reported by the index since Q4 2009 (109.1%). Despite the massive increase in corporate earnings, increasing prices prevented a material rerating of U.S. equity valuations, which remain at stretched levels relative to recent history. The forward 12-month price-to-earnings ratio of the S&P 500 Index remains at 21.4x -- well above both the five-year (18.1x) and ten-year (16.2x) averages.

In terms of size and style, small-cap equities (Russell 2000 Index +62.0%) made back some lost ground relative to large-cap equities (Russell 1000 Index +43.1%) and the value factor (Russell 1000 Value Index +43.7%) narrowly outperformed the growth factor (Russell 1000 Growth Index +42.5). Much of the outperformance of the value factor was driven by the reflation trade which dominated the market narrative from around August when news broke about the successful mRNA vaccines to around mid-May and June when concerns around the Delta variant and a hawkish Fed pivot pushed down the long end of the U.S. yield curve. That reflation trade favored sectors more heavily weighted in the value benchmarks, including financials, industrials, and materials, which returned 57.6%, 47.5%, and 46.0% over the fiscal year, respectively.

International Equity

Global equities largely tracked U.S. equities over the trailing twelve months, and the MSCI ACWI Index returned 39.3% in U.S. dollar terms, with weakness in the U.S. dollar providing a slight boost to returns experienced by unhedged U.S. investors. Emerging market equities delivered a total return of 40.9% in U.S. dollar terms, edging out U.S. equities (S&P 500 Index +40.8%) and outpacing international developed equities (MSCI EAFE +32.4%).

The superior performance of emerging market equities was driven by a rebound in its Latin American contingent broadly, and Brazil and Mexico specifically. The MSCI Brazil Index returned +46.6%, boosted by a 10% appreciation of the Brazilian real relative to the U.S. dollar. In Mexico, stocks advanced 55.9%, as the Mexican peso appreciated 15.4% relative to the dollar. In Asia, Taiwanese (+70.5%) and Korean (+66.2%) equites delivered impressive returns, but Chinese equities returned just 27.4%, materially lagging the global opportunity set. Chinese equities began to sell off in late February, with the initial catalyst being a decision from the People's Bank of China to shift its focus away from ensuring accommodative financial conditions to enable a swift economic recovery and toward limiting the risks of excessive leverage which has been building up in certain segments of the economy, most notably the domestic housing market. This shift sparked a sell-off in some of the high-flying tech companies that had driven emerging market outperformance in the early days of the pandemic. Losses in China accelerated in the second quarter of 2021.

In Europe, stocks returned just 26.6% in local terms, but the strong run of the euro relative to the dollar boosted performance for unhedged U.S. investors in European equities to 35.1%. Inflation in Europe has picked up more slowly than in the U.S. or the emerging markets. This, combined with the Eurozone's relative inflexibility with regard to fiscal policy, likely supports the case that the European Central Bank will have the longest runway for continuing to provide monetary accommodation. Within the international developed complex in Asia, Japanese equities underperformed in both local (+28.4%) and U.S. dollar (+24.8%) terms. The Japanese yen was one of the few currencies which depreciated relative to the dollar over the last year, due in part to the significant increase in U.S. Treasury yields above Japanese government bond yields, which officials at the Bank of Japan have committed to keeping within a relatively narrow range (within 25 basis points of 0.0%).

Fixed Income

The reflation narrative and debate over the persistence of higher inflation rates largely directed the global fixed income markets over the last year. In the U.S., the 10-year Treasury yield rose from 0.66% to a post-pandemic peak of 1.74% by the end of the first quarter of 2021, before moderating to 1.47% by the end of the fiscal year. Breakeven inflation rates tracked Treasury yields in terms of direction – the ten-year breakeven inflation rate rose from 1.34% to an eight-year high of 2.56% in May before moderating slightly during the last few weeks of the fiscal year. Overall, the Fed has remained steadfast in its view that recent increases in inflation rates have been a byproduct of the broad economic reopening, pandemic-related supply chain disruptions, and low base effects (inflation is a year-over-year calculation which means the depressed prices of early 2020 create the appearance of rising inflation). In other words, their view is that increases in inflation are more likely to be transitory than persistent. In any case, the Fed appears to be focusing more on the risks to the labor market and economic recovery of pulling back on accommodative policy too early, rather than the risk of runaway inflation. This likely stoked a sizeable steepening in the yield curve and a surge in longer-term interest and breakeven inflation rates. However, at their June meeting, Fed officials signaled that a full labor market recovery was more of a "when" question rather than an "if" question, which markets took as hawkish on the margin. Currently, conversations at the Fed are focused on the optimal time to begin tapering asset purchases.

In terms of performance, global treasuries returned 1.2% in U.S. dollar terms, with U.S. Treasuries underperforming (-3.5%), and longer-duration Treasuries in the U.S. faring the worst (-10.6%). Large increases in breakeven inflation rates helped to buffer Treasury inflation-protected securities from the impact of increasing interest rates, and the Bloomberg Barclays TIPS Index returned 6.5%. Credit spreads compressed to the lowest level since the Global Financial Crisis and default rates fell to below average levels, supporting outperformance of riskier credit. In the U.S., corporates within the Bloomberg Barclays Aggregate Index delivered a return of 3.3%, high-yield credit returned 15.4% as spreads dipped from 6.26% to 2.68%, and bank loans advanced 11.7%.

Portfolio Review

The Board maintained its existing strategic asset allocation in fiscal year 2021 as well as its portfolio structure. During the period, OPERS replaced its active large cap value manager with a passive exposure due to a manager specific event. Active management for this mandate may be revisited in the future.

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, 2021 have been calculated using a time-weighted rate of return methodology based upon market values. As shown in the following table, for the 1-year time period ended June 30, 2021, the U.S. Equity asset class slightly outperformed its benchmark but underperformed the blended index for the 3 and 5-year annualized periods. For all periods, however, asset class performance was above median compared to the US equity peer group. Returns in recent years have been particularly challenging for active U.S large cap managers compared to passive alternatives but have seen some improvement since value headwinds have mitigated. The Non-U.S. Equity asset class outperformed the benchmark for all annualized time periods measured with the exception of the 5-year annualized period where it matched 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 performed above the benchmark for all annualized time periods measured as of June 30, 2021. During the fiscal year, bonds lagged equities by a wide margin in an environment where high beta strategies were rewarded. The Fixed Income composite was in the bottom quartile of the peer group over the fiscal year end and is impacted by the fact that its structure is more conservative compared to a many large plan peers.

The total OPERS Plan performed above its Policy Benchmark for the 1-year period and all annualized time periods ended June 30, 2021. The total OPERS Plan ranked in the upper half of the peer

Verus

universe of Public Funds greater than $1 Billion for all periods with longer-term periods at or near the top quartile compared to peers.

PERIODS ENDED 6/30/21	ONE YEAR	THREE YEARS	FIVE YEARS
Domestic Equity	46.0%	17.8%	17.7%
85% Russell 1000 / 15% Russell 2000	45.9%	18.4%	17.8%
Rank*	33	43	41
Non-U.S. Equity	36.9%	10.6%	11.6%
MSCI ACWI ex-U.S.	36.3%	9.9%	11.6%
Rank*	62	44	54
Fixed Income	0.1%	6.6%	3.9%
78% BC Agg./11% Citi 20+ Year Tsy./11% BC U.S. TIPS	-0.7%	5.8%	3.2%
Rank*	83	29	60
Total Fund	28.0%	12.5%	11.7%
*Policy Benchmark***	26.9%	12.4%	11.6%
Public Fund > $1 Billion Median*	27.4%	11.0%	11.0%
Rank*	38	16	28

* 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. The sound and disciplined policies implemented by OPERS are evidenced by its competitive performance compared to relevant benchmarks and its unusually strong total Plan peer ranking over longer time periods.

Yours truly,

Margaret S. Jadallah
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
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Dear Members:

The Fund's total return of 27.99% (gross of fees) for fiscal year 2021 was impressive, and well above the 6.5% long-term actuarial return target. The result also exceeded the 26.94% return of the policy portfolio for the period. The bull market run of the stock market in the U.S. resumed with vigor during the fiscal year. Stock market returns outside the U.S. were also very strong and contributed substantially to the total return of the Fund. The return to the broad bond market in the U.S. was subdued, as medium-and long-term rates rose during the period. While global capital markets still exhibited some volatility due to uncertainties concerning the coronavirus pandemic, the trajectory of global equity markets was decisive. Coming off market lows in March of 2020, the U.S. stock market garnered returns for the fiscal year that counted among the strongest returns in history. The nominal return to the Fund was the highest recorded in more than 30 years. Taking equity risk, especially in the U.S., was handsomely rewarded for the fiscal year.

We endeavor to build a durable portfolio that will weather tumultuous market conditions. 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 index funds. This year's letter, which covers the 2021 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.

Economic Environment

Gross Domestic Product (GDP), the primary gauge for economic activity in the U.S., reflected the continued recovery in the second quarter of 2021 by growing at an annualized rate of 6.6% (revised upward from the advance estimate). This result was a modest improvement over the annualized growth rate of 6.3% registered for the first quarter of 2021, but still disappointed economists who has forecasted a far higher growth rate. The overall increase in economic activity in the U.S. came as consumer spending rose nearly 12% during the second quarter. Consumer spending accounts for almost 70% of all the economic activity in the U.S. The U.S. economy suffered a 31.4% collapse in the second quarter of 2020 but bounced back 33.4% in the subsequent three-month period. The National Bureau of Economic Research declared the shortest recession on record, beginning in February 2020 and ending in April 2020. The recovery in the GDP growth rate in the U.S. showed that, so far, the economic damage from the measures taken to reduce the spread of the coronavirus was waning. The labor market had also improved, as the national unemployment rate dropped to 5.9% for June 2021. That was down from the 11.1% unemployment rate recorded for June 2020. Recent hiring activity has been robust in the services sector, specifically in the Leisure and Hospitality sectors, which accounted for 40% of the 943,000 non-farm payroll gains in July of 2021. While the labor market has shown signs of improvement, initial jobless claims continue to be persistently high, at 400,000 claims per week as of the writing of this report. The inflation rate experienced in the U.S. also jumped dramatically over the period. Federal Reserve Chairman Jerome Powell stated "that if the economy evolved broadly as anticipated, it could be appropriate to start reducing the pace" of asset purchases (known as quantitative easing). Many Federal Reserve observers interpreted Chairman Powell's comments to mean that the Federal Reserve would look to curtail the quantitative easing programs in the 4th quarter of 2021. However, a rise in the infection rates of the Delta variant has threatened to

Chief Investment Officer's Report (continued)

delay or pause the economic progress experienced thus far. Given the generally sanguine economic data, the U.S. dollar weakened relative to the basket of non-U.S. developed market currencies. Note that a weaker dollar makes U.S. exports less expensive in other countries and contributes positively to U.S. dollar-based investor returns in foreign markets.

Economic activity in the Eurozone followed a similar trajectory, but did not exhibit the same robust acceleration as the U.S. economy. The economies of many overseas countries have yet to recover to levels last seen prior to the pandemic-related decline in activity. Like the U.S., inflation showed a marked increase across the Eurozone, driven by increases in energy prices and supply shortages. The European Central Bank (ECB) announced that it would "moderately lower" the pace of bond buying in the future, given the recent improvement in economic dynamics. This came after an announcement to "significantly" increase the rate of bond purchases earlier in the year. The monetary response by central banking authorities, which has been on a global scale to lessen the damaging impact of the pandemic on economies, appears to be approaching the wind-down phase in developed economies.

U.S. and Global Stock Markets

The U.S. stock market, as measured by the Russell 3000 Index, exhibited a bit of volatility but still rose dramatically 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 market was sensitive to fears regarding the continued pandemic and uncertainty of new economic stimulus during the fiscal year but still produced historic gains.

Change in the Russell 3000 Index during the fiscal year ended June 30, 2021

Value at 6/30/21 14,098.8
Value at 6/30/20 9,779.7

Source: FTSE Russell

The Russell 3000 ended the one-year period through June 30, 2021 up 44.16%, despite the volatility exhibited in the first half of the fiscal year. While still rising in the first two quarters of the fiscal year, investors experienced volatility in the market from continued fears of the pandemic and uncertainty regarding the politics surrounding more domestic fiscal stimulus. Despite these fears, the market delivered a robust return for the fiscal year. Within the Russell 1000 index, the returns to sectors were very strong and favored the more economically sensitive sectors. All of the sectors in the index produced strongly positive returns for the fiscal year. The two "laggards" of the sectors within the index, consumer staples and healthcare, did not exceed a 30% return threshold for the fiscal year. Large capitalization stocks, while still having performed admirably, dramatically underperformed small capitalization stocks as the Russell 2000 index rebounded over last fiscal year by gaining over 62% for the one-year period ending June 30. Equity style (i.e. market capitalization size,

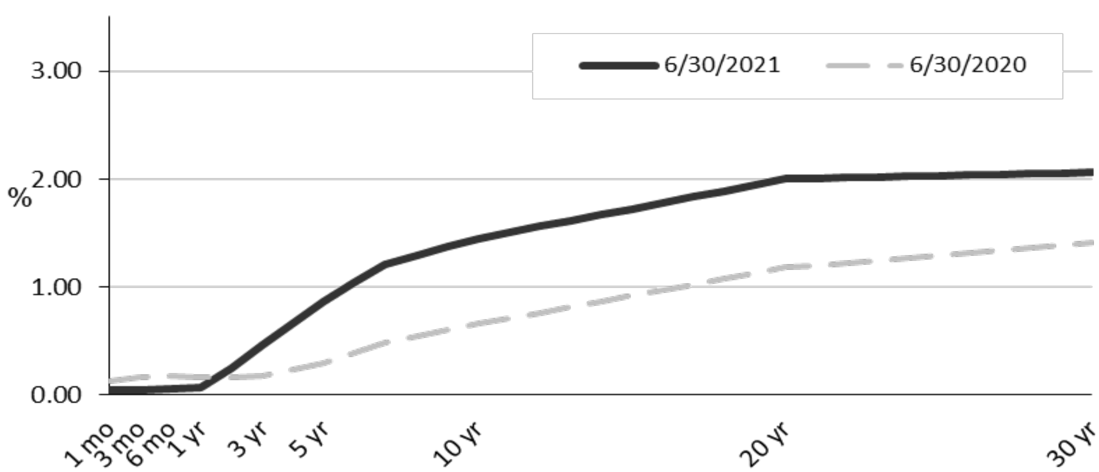
Chief Investment Officer's Report (continued)

growth, value) leadership reversed the trend that favored large capitalization and growth-oriented stocks during the fiscal year. The value index just edged out the growth index in large capitalization space, but returns were decidedly in favor of the value style in small capitalization space. The payoff to assuming equity risk in the most economically sensitive and "riskier" areas of the market, like small capitalization stocks, was epic.

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), which includes public equities from both developed and emerging markets, gained 35.72% (net) in U.S. dollar terms for the fiscal year. The U.S. dollar weakened relative to many other foreign currencies, which contributed to gains experienced by U.S. dollar investors in foreign markets. Emerging market returns in U.S. dollar terms were better than non-U.S. developed market returns, having returned almost 41% for the period (again, with an assist from a weakening dollar). It is worth mentioning that two countries experienced subdued returns and underperformed their respective indices, one developed and one emerging. In the U.K., the stock market return reflected not only the underlying economic challenges brought on by the pandemic, but also continued challenges as the country extricates itself from the E.U. The stock market in China also faced pressure related to the emergence of the Delta variant, and regulatory tightening on technology companies that weighed on the market.

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, the yield curve steepened over the course of the fiscal year, as medium-and long-term rates rose. The Federal Reserve has kept the Federal Funds Rate at a range of 0%-0.25%, where it has been since March of 2020. Prices paid by consumers skyrocketed towards the end of the fiscal year, as Core CPI, the preferred measure of inflation by the Federal Reserve, increased to an annual rate of 4.5% in June. The increase, driven by continued supply constraints due to the pandemic and proliferation of the Delta variant, was the largest in the last 13 years. While the Federal Funds Rate remains low, recent strength in the U.S. economy has given rise to discussion about curtailing some of the other accommodative measures. Federal Reserve Chairman Powell stated that the decision to raise rates was a "different and substantially more stringent test" than the "coming reduction in asset purchases." The current expectation is that in late 2021 the Federal Reserve will begin to taper the asset purchase programs implemented at the beginning of the pandemic. Outside of the U.S., yields for many countries remained at depressed levels despite a notable increase in inflation. The European Central Bank recently announced new rules to allow more latitude in tolerating elevated inflation levels before raising interest rates. Much like the Federal Reserve, the ECB also signaled that the policy of easy money would likely continue, but that other programs (like asset purchases) had a limited shelf life.

U.S. Treasury Yield Curve



Source: U.S. Treasury

Chief Investment Officer's Report (continued)

Investment Returns Through June 30, 2021

U.S. Equity	Style	1 Year	3 Years	5 Years
Russell 3000	Broad U.S. Equity	44.16%	18.73%	17.89%
S&P 500	Large Cap Equity	40.79%	18.67%	17.65%
Russell 1000	Large Cap Equity	43.07%	19.16%	17.99%
Russell 1000 Growth	Large Cap Growth	42.50%	25.14%	23.66%
Russell 1000 Value	Large Cap Value	43.68%	12.42%	11.87%
Russell 2000	Small Cap Equity	62.03%	13.52%	16.47%
Russell 2000 Growth	Small Cap Growth	51.36%	15.94%	18.76%
Russell 2000 Value	Small Cap Value	73.28%	10.27%	13.62%
Oklahoma Public Employees Retirement System	**Broad U.S. Equity**	**45.98%**	**17.83%**	**17.73%**

U.S. Fixed Income	Style	1 Year	3 Years	5 Years
ML 3-Month T-Bill	Cash	0.07%	1.22%	1.13%
Bloomberg Barclays U.S. Aggregate	Core Bonds	-0.33%	5.34%	3.03%
Citigroup 20-year Treasury Average	Long Term Bonds	-10.63%	8.10%	3.15%
Bloomberg Barclays Corporate High Yield	High Yield Bonds	15.37%	7.45%	7.48%
Oklahoma Public Employees Retirement System	**Domestic Fixed Income**	**0.10%**	**6.65%**	**3.86%**

International Equity	Style	1 Year	3 Years	5 Years
MSCI ACWI Ex-US (net)	Broad Non-US Equity	35.72%	9.38%	11.08%
MSCI EAFE (net)	Developed Non-US Equity	32.35%	8.27%	10.28%
MSCI Emerging Market (net)	Emerging Non-US Equity	40.90%	11.27%	13.03%
Oklahoma Public Employees Retirement System	**Non-U.S. Equity**	**36.92%**	**10.57%**	**11.56%**

Oklahoma Public Employees Retirement System	**Total Fund**	**27.99%**	**12.46%**	**11.69%**

Source: Various index providers, including FTSE Russell, S&P, Bloomberg Barclays, Citigroup, 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.

Investment Performance

Bull market returns

The Fund produced a total return of 27.99% for the period gross of fees (27.82% net of fees), which outperformed the policy benchmark portfolio by 104 basis points (gross of fees) for the period. The extraordinary nominal returns were driven by the strength of the equity markets, across both the U.S. as well as in non-U.S. equity markets. The diversifying assets of the Fund, namely fixed income, cash, and real estate did not contribute meaningfully to the total return experienced over the fiscal year. But active management in the fixed income asset class somewhat countered the negative impact of the performance of the asset class over the period.

The outperformance of the Fund relative to the Policy portfolio can be attributed to two main factors, the actual asset allocation relative to the policy allocation and the results from the active managers. Both factors contributed strongly to the excess return of the Fund. At the manager level, the results from active management in excess of respective benchmarks this year were mixed, but overall accretive to the excess return of the Fund. The mangers who had a focus on more quality growth areas of the equity market, both in the U.S. and internationally, in addition to the fixed income managers, added substantial excess return relative to their respective benchmarks. The managers who focused on the more value-oriented areas of the market struggled to keep up with their respective benchmarks. From an asset allocation

Chief Investment Officer's Report (continued)

perspective, remaining overweight to the equity markets, but still within the allocation range contained in the policy, proved most beneficial.

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. delivered returns that were extraordinary, as the domestic equity portfolio produced a total return of almost 46% in aggregate for the fiscal year. While only one manager who actively manages U.S. stocks for the Fund outperformed the index during the year, their results more than compensated for the remaining managers who marginally underperformed their respective benchmarks. Therefore, as a group, active U.S. equity management contributed to the Fund's excess performance relative to the policy portfolio for the fiscal year. The U.S. active manager who outperformed was able to harvest tremendous excess returns by selecting stocks in the higher quality growth areas of the market for smaller capitalization stocks. The remainder of the U.S.-focused active managers found the environment less favorable (relative to the index) and struggled with the more value-oriented exposure in their respective portfolios—but still produced astounding nominal returns. As a group, the large capitalization managers underperformed their respective benchmarks for the period. The small capitalization managers outperformed, but the small capitalization result was due to one manager who exhibited superior stock selection in the "growthier" parts of the small capitalization stock universe.

Fixed Income
The Fund's bond portfolio was essentially flat and did not contribute meaningfully to nominal returns for the fiscal year. As mentioned above, yields rose in the medium-and long-term segments of the curve, which resulted in a negative total return to the asset class. The bond portfolio provided a positive nominal return for the fiscal year due to the results of the advisors, despite the asset class having a negative total return for the period. The two advisors who focus on the broader bond market both outperformed the benchmark, and despite rising rates, delivered meaningful excess returns for the period by emphasizing non-Treasury sectors of the bond market. The price impact of rising rates is felt most in the longer end of the yield curve. The Fund's advisor who uses interest rate positioning in managing its portion of the bond portfolio performed unfavorably in nominal terms, having lost over 11% for the period. However, that is after having gained almost 30% in the prior fiscal year as rates declined dramatically due to the pandemic. The inflation-sensitive portion of the bond portfolio, which features U.S. Treasury securities, again performed quite well as inflationary pressures mounted. Bonds are maintained in the portfolio for their volatility-dampening effect when combined with exposure to the equity markets. Emphasizing the non-Treasury bonds in the index helped to enhance returns, but the rising rate environment over the fiscal year proved hard to overcome given the general low level of yields at the beginning of the fiscal year.

Non-U.S. Equity
The non-U.S. equity segment lagged the total return of the U.S. equity segment of the Fund, having returned almost 37% in U.S. dollar terms for the period. The U.S. dollar weakened relative to many other foreign currencies, which contributed positively to gains 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 this 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. The manager focusing on the international value area of the equity markets modestly underperformed its benchmark; the benchmark itself was up over 38% in U.S. dollar terms for the period. The advisor who emphasizes the growth style significantly outperformed its benchmark and contributed positively to both nominal and excess returns. The Fund's allocation to the active managers and their relative performance resulted in the international portion of the Fund outperforming the 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.

Chief Investment Officer's Report (continued)

Asset Class	Min	6/30/2021	Target	Max
Cash and Real Estate	0.0%	0.3%	0.0%	0.0%
Domestic Fixed Income	27.5%	29.9%	32.0%	36.5%
U.S. Equity	34.4%	41.3%	40.0%	45.6%
Non-U.S. Equity	25.0%	28.5%	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.

The outlook for the global economic environment continues to lack clarity and is very much dependent on getting the COVID-19 (and variant) pandemic under control. Global economic activity rebounded from the depths of the pandemic-related collapse, but not all economies have recovered to pre-pandemic levels of activity. The U.S. has experienced a substantial recovery in the jobs lost due to the pandemic. The global response from governments world-wide has provided a stabilizing force for their respective economies and has unquestionably supported financial markets. More recently, policymakers have signaled these programs, which had averted economic chaos, appear to be in the initial phase of winding-down. Inflation has increased, and uncertainty with respect to the durability of inflationary forces has caused some concern. If the Federal Reserve and other global policymakers act too swiftly to remove the stimulus, the result could be subdued growth going forward. However, if the actions are too slow, economies run the risk of overheating and introducing new and more durable inflationary forces into the economy. Last year, I said the evolution of support in the form of fiscal and monetary policy will be a key factor to consider in the outlook going forward. This year, I believe the timing of the withdrawal of those highly successful global programs is the key to the outlook.

My largest concern continues to be the prospect of generating and maintaining investment results that match or exceed the actuarial assumed rate of return of 6.5%. This will continue to be a challenging task going forward. Interest rates remain historically low, which pressures the long-term return-generating capacity of a diversified portfolio. Additionally, with the stock market hitting record levels, equity market valuation levels appear stretched and potentially detached from the underlying economic fundamentals, which reduces prospective future returns. The returns from equity markets are highly unlikely to repeat the results experienced this fiscal year.

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 sell-off in the bond market and increase in yields, the total return of the bond market was negative as the low level of yields was not enough to compensate for the capital losses from rising rates over the course of the fiscal year. Despite the rise in rates, the level of yields in the market continues to be relatively low. My medium-term expectation for the total return of the broad U.S. fixed income market going forward would more closely reflect current yields, which are around 1%. Bonds are a necessary part of a diversified portfolio but are unlikely to contribute as significantly to the total return of the Fund as they have in the past.

Chief Investment Officer's Report (continued)

Equity

Equity markets are particularly difficult 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 global economy has emerged from the effects of the pandemic, but growth rates are not robust or evenly distributed globally. Corporate earnings have been surprisingly strong, but inflationary forces could pressure earnings that the market has priced to near perfection, and beyond in several sectors. Volatility of the market is high and is likely to remain elevated over the foreseeable future as investors vacillate between the economic realities created by the pandemic and the effect of stimulative measures by policymakers. Optimism regarding the recovery of the economy in the face of the pandemic won the day for this fiscal year, pushing equity markets in the U.S. to new highs. But with the market priced to or through perfection, the continuation of robust equity market returns is doubtful to say the least.

Recent Events

There were no changes to the Fund's strategic asset location during the year, but the Fund did experience a change to the manager structure during the fiscal year. In the second quarter of the fiscal year, the Fund's large capitalization value manager, AJO, announced that the firm would close on December 31, 2020. The firm's value orientation had been out of favor for a duration and magnitude long enough to negatively impact the economics of the firm. As a result of the closure of AJO, OPERS replaced the active large capitalization value mandate with a similarly positioned index fund managed by BlackRock. The mandate represented a policy allocation of 3% of the portfolio. The transition to the new mandate was completed in December 2020.

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, 2021, 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
FNMA Single Family Mortgage 2.5% 30 Years	163,670,060	$	168,963,764
U.S. Treasury N/B .125% Due 05-31-2023 Reg	90,895,000		90,699,718
U.S.Treasury Bonds DTD 05/15/2016 2.5% Due 05-15-2046 Reg	80,560,000		87,275,432
FNMA Single Family Mortgage 2% 30 Years	80,198,329		80,818,613
U.S. Treasury Notes .125% Due 04-30-2023 BEO	74,480,000		74,340,350
U.S. BDS DTD 00247 2.5% Due 02-15-2046 REG	66,800,000		72,363,188
U.S. NTS T NTS .125% Due 06-30-2023 REG	71,500,000		71,329,629
U.S. Treasury Notes DTD 05/31/2021 .75% 05-31-2026	64,735,000		64,365,809
U.S. Treasury Notes NTS DTD 04/30/2021 .75% 04-30-2026	64,031,800		63,706,639
U.S. Treasury Notes NTS DTD 03/15/2021 .25% 03-15-2024	63,047,000		62,795,797

Ten Largest Stock Holdings (By Fair Value):

Security	Shares		Fair Value
Apple Inc.Common Stock	865,851	$	118,586,953
Microsoft Corporation Common Stock	380,010		102,944,709
Amazon.com, Inc. Common Stock	21,873		75,246,620
Alphabet Inc. Common Stock	35,826		88,253,218
Facebook, Inc. Class A Common Stock	150,716		52,405,460
Taiwan Semiconductor Manufacturing Common Stock	318,268		38,243,083
Paypal Hildgs Inc	99,364		28,962,619
Nvidia Corp Com	30,737		24,592,674
Tesla Inc Com	32,720		22,239,784
United Health Group Inc Com	55,493		22,221,617

Investments in Funds (By Fair Value):

Fund	Units		Fair Value
BlackRock Russell 1000 Index Fund	6,177,858	$	2,164,276,560
BlackRock ACWI ex-U.S. Index Fund	54,985,620		2,006,239,813
BlackRock U.S. TIPS Index Fund	15,915,650		426,092,846
BlackRock ACWI ex-U.S. Growth Index Fund	16,355,237		400,290,231
BlackRock Russell 1000 Value Index Fund	2,023,506		371,728,248

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, 2021, the investment portfolio of OPERS was allocated by type and style as follows:

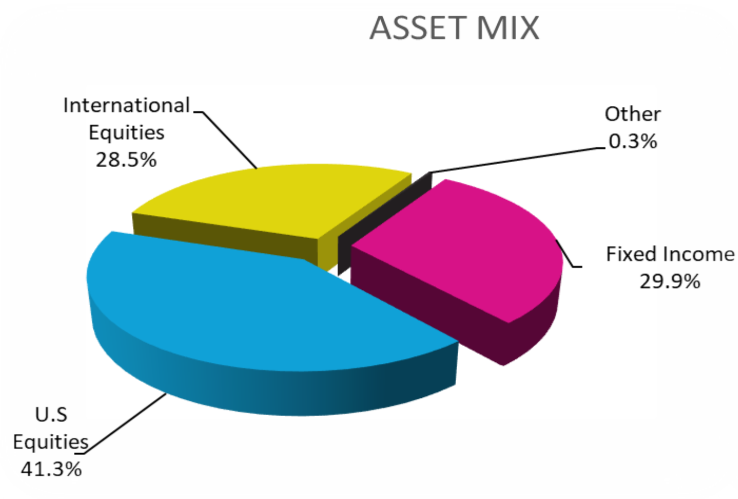
Investment Type and Manager	Style	Fair Value*	Percent of Total Fair Value
		(000's)	
Fixed Income:			
Blackrock Financial Management, Inc.	Constrained Core	$ 2,136,207	16.4%
Hoisington Investment Management	Interest Rate Anticipation	385,384	3.0%
BlackRock Institutional Trust Company	Index Fund – U.S. TIPS	426,098	3.3%
Metropolitan West Asset Management	Core Plus	1,332,596	10.2%
Total Fixed Income		4,280,285	32.9%
U.S. Equities:			
BlackRock Institutional Trust Company	Index Fund – Russell 1000 and Value	2,536,005	19.3%
Mellon Capital Management	Large cap – Enhanced Index	730,301	5.6%
State Street Global Advisors	Large cap – Enhanced Index	726,920	5.6%
Westfield Capital Management	Large cap – Growth	390,626	3.0%
UBS Global Asset Management	Small cap – Growth	263,001	2.0%
Barrow, Hanley, Mewhinney & Strauss, Inc.	Small cap – Value	244,280	1.9%
DePrince, Race & Zollo, Inc.	Small cap – Value	276,488	2.1%
Total U.S. Equities		5,167,621	39.5%
International Equities:			
Baillie Gifford Overseas Ltd.	International Growth	424,691	3.3%
Mondrian Investment Partners, Ltd.	International Value	728,402	5.6%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S. Growth	400,292	3.1%
BlackRock Institutional Trust Company	Index Fund – ACWI ex-U.S.	2,006,242	15.4%
Total International Equities		3,559,627	27.4%
Short-term Investment Funds	Operating Cash	33,448	0.3%
Total Managed Investments		13,040,981	100.1%
Real Estate		9,285	
Securities Lending Collateral		602,793	
Cash Equivalents on Deposit with State		3,545	
Total Investments and Cash Equivalents		$ 13,656,604	
Statement of Fiduciary Net Position			
Cash Equivalents		523,294	
Investments		13,133,310	
Total Investments and Cash Equivalents		$ 13,656,604	

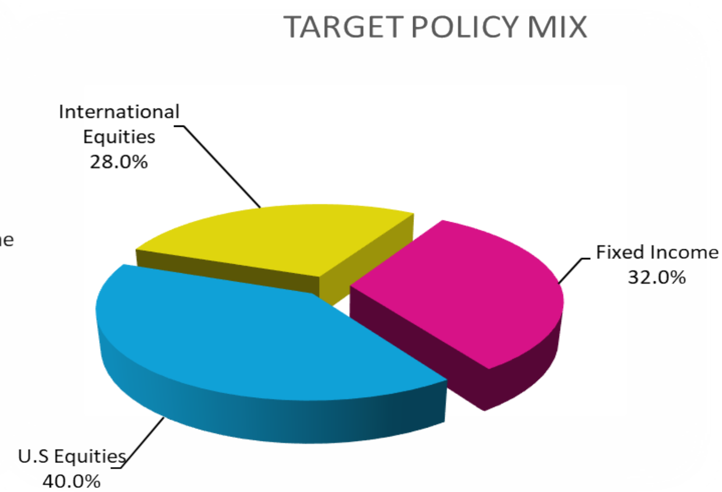
* *Manager fair values include their respective cash and cash equivalents.*

Asset Comparison

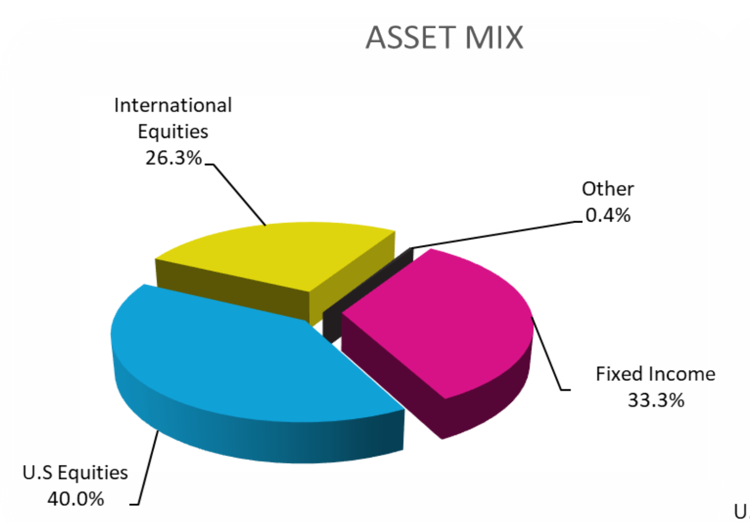
A comparison of the actual investment distribution at June 30, 2021 and 2020, based on the net investment manager holdings, including accrued income, payables and receivables, compared to the target allocation for each year is as follows:

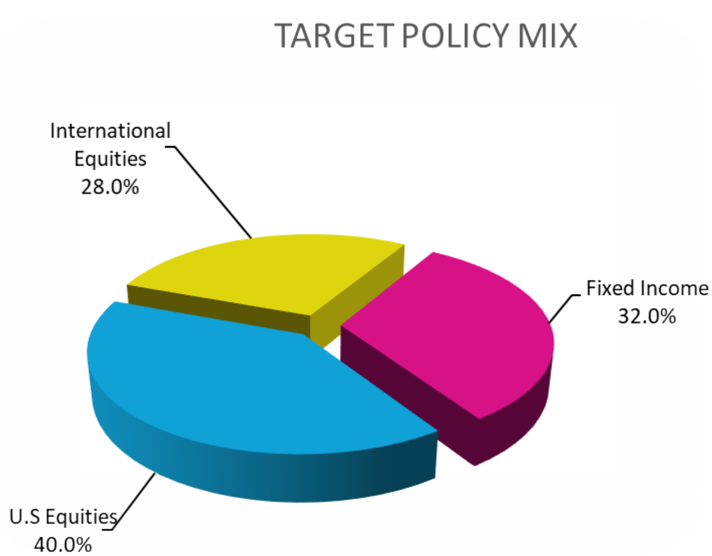
2021





2020





Schedule of Stock Brokerage Commissions Paid

Year Ended June 30, 2021

Brokerage Firm	Shares Traded	Dollar Volume of Trades	Commission Dollar Amount	Commission Per Share
Goldman Sachs	13,191,009	$ 767,838,592	$ 168,210	0.013
Morgan Stanley	16,249,838	836,852,172	187,674	0.012
National Financial Services	9,075,154	494,654,563	68,106	0.008
Bofa	5,745,383	291,064,118	54,084	0.009
Citigroup	3,134,881	216,105,623	48,699	0.016
J.P. Morgan	3,555,031	158,126,889	33,276	0.009
Instinet	4,322,960	157,041,701	86,668	0.020
Jonestrading Institutional Services	5,684,578	139,102,652	189,867	0.033
Credit Suisse	1,439,935	107,715,525	25,462	0.018
Keybanc Capital Markets	2,876,407	101,010,878	114,453	0.040
Stifel, Nicolaus & Company	2,359,923	88,556,621	94,137	0.040
UBS	1,009,857	83,989,616	3,354	0.003
Merrill Lynch	5,270,656	75,491,536	26,143	0.005
Jefferies	1,626,679	74,336,521	28,411	0.017
Virtu Americas	1,175,823	72,259,448	4,564	0.004
Loop Capital Markets	1,496,442	69,302,931	14,526	0.010
Robert W. Baird	1,654,797	68,465,389	65,254	0.039
Investment Technology Group	1,422,328	62,862,213	10,120	0.007
Pershing	1,360,775	55,187,137	9,940	0.007
Mischler Financial Group	704,642	49,594,965	5,377	0.008
Other	54,005,895	1,094,030,884	536,412	0.010
Total	137,362,993	$ 5,063,589,974	$ 1,774,737	0.013

2021

TOGETHER

Strong financial stewardship allows OPERS to meet future challenges. TOGTHER with wisdom and forward-thinking, the commitment in providing a secure retirement remains solid.

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October 8, 2021

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, 2021.

The purpose of this report is to provide a summary of the funded status of the System as of July 1, 2021 and to provide the actuarially determined rate. While not verifying the data at the source, the actuary performed tests for consistency and reasonability. There have been no changes to the actuarial assumptions or methods since the last 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 note that as we prepare this report, the world is in the midst of a pandemic. We have considered available information, but do not believe that there is yet sufficient data to warrant the modification of any of our assumptions. We will continue to monitor the situation and advise the Board in the future of any adjustments that we believe would be appropriate.

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 appropriate actuarial models that were developed for this purpose. These models use 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, 2021, 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

	7/1/2021 Valuation	7/1/2020 Valuation	% Change
1. PARTICIPANT DATA			
Number of:			
Active Members	31,711	33,115	(4.2)
Retired and Disabled Members and Beneficiaries	36,351	36,179	0.5
Inactive Members	6,133	6,082	0.8
Total Members	74,195	75,376	(1.6)
Projected Annual Salaries of Active Members	$ 1,556,561,344	$ 1,571,954,116	(1.0)
Annual Retirement Payments for Retired Members and Beneficiaries	$ 661,011,030	$ 648,673,669	1.9
2. ASSETS AND LIABILITIES			
Total Actuarial Accrued Liability	$ 11,046,240,166	$ 10,943,079,053	0.9
Market Value of Assets	$ 12,525,883,234	$ 10,097,798,827	24.0
Actuarial Value of Assets	$ 10,991,205,271	$ 10,212,241,395	7.6
Unfunded Actuarial Accrued Liability	$ 55,034,895	$ 730,837,658	(92.5)
Funded Ratio	99.50%	93.3%	6.6
3. EMPLOYER CONTRIBUTION RATES AS A PERCENT OF PAYROLL			
Normal Cost Rate	10.83%	10.99%	
Amortization of Unfunded Actuarial Accrued Liability	0.52%	6.19%	
Budgeted Expenses	0.48%	0.47%	
Total Actuarially Determined Contribution Rate	11.83%	17.65%	
Less Estimated Member Contribution Rate	4.25%	4.24%	
Employer Actuarially Determined Contribution Rate	7.58%	13.41%	
Less Statutory State Employer Contribution Rate	16.50%	16.50%	
Contribution Shortfall/(Surplus)	(8.92%)	(3.09%)	

Analysis of Financial Experience

Gains & Losses in Actuarial Accrued Liability During the Year Ended June 30, 2021
Resulting from Differences Between Assumed Experience & Actual Experience

	Type of Activity	(Gain) or Loss for Year End 2021
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.	$ (15,100,000)
2.	**Disability Retirements.** If disability claims are less than assumed, there is a gain. If more claims, a loss.	1,000,000
3.	**Deaths.** If more deaths occur than assumed, there is a gain. If fewer, there is a loss.	(44,800,000)
4.	**Withdrawal from Employment.** If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(2,700,000)
5.	**Pay Increases.** If there are smaller pay increase than assumed, there is a gain. If greater increases, a loss.	(5,600,000)
6.	**New Entrants.** All new entrants to the System create a loss.	19,700,000
7.	**Other.** Miscellaneous gains and losses resulting from data adjustments, employee transfers, valuation methods, etc.	(26,800,000)
8.	**(Gain) or Loss During Year From Financial Experience.**	(462,200,000)
9.	**Composite (Gain) or Loss During Year.**	$ (536,500,000)

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, 2012	505,373	4,832,068	2,997,197	8,334,638	6,682,200	100	100	44.9	80.2
July 1, 2013	517,653	5,032,769	3,005,700	8,556,122	6,978,873	100	100	47.5	81.6
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

[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, 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
July 1, 2013	43,273	1,695,347,809	39,178	2.08
July 1, 2012	42,569	1,633,837,374	38,381	(0.90)

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, 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
June 30, 2013	1,767	31,633,122	895	10,184,240	31,135	488,173,423	4.60	15,679
June 30, 2012	1,703	29,234,998	858	10,430,214	30,263	466,724,541	4.20	15,422

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)

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total Pension Liability	$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	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	($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	112.51%	91.59%	98.63%	97.96%	94.28%	89.48%	96.00%	97.90%		
Covered payroll	$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	-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)

	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012
Total OPEB Liability	$320,668,249	$328,431,762	$321,048,037	$328,143,546	$326,975,262					
Plan Fiduciary Net Position	458,150,586	375,314,784	359,922,778	341,084,506	315,521,246					
Net OPEB Liability	($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	142.87%	114.27%	112.11%	103.94%	96.50%					
Covered payroll	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					

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 to 2030 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. We note that House Bill 3350 (2020) granted a one-time stipend to retirees, funded by the System.

6. The individual entry-age normal actuarial cost method of valuation was used in determining actuarial accrued liability and normal cost. Actuarial gains and losses reduce or increase the unfunded actuarial accrued liability and are amortized over the remaining amortization period (6 years as of July 1, 2021).

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, 2016 through June 30, 2019.

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 Eligible Regular Non-Elected Active Members Retiring Within Next Year

Those Eligible for Unreduced Retirement and Hired Before November 1, 2011

Retirement Ages	Percent	Retirement Ages	Percent
50	15%	61	20%
51	15%	62	25%
52	15%	63	15%
53	15%	64	15%
54	15%	65	30%
55	10%	66	25%
56	10%	67	25%
57	11%	68	25%
58	12%	69	25%
59	13%	70-74	50%
60	14%	75	100%

Those Eligible for Unreduced Retirement and Hired on or after November 1, 2011

Retirement Ages	Percent
60	*
61	*
62	*
63	*
64	*
65	*
66	25%
67	25%
68	25%
69	25%
70-74	50%
75	100%

*30% when first eligible and 15% thereafter.

Schedule 2B

Percent of Eligible Non-Elected Active Members Retiring Within Next Year

Those Not Eligible for Unreduced Retirement or Department of Corrections Members With Less Than 20 Years of Service, hired before November 1, 2011

Regular Employees		Department of Corrections			
Retirement Ages	Percent	Retirement Ages	Percent	Retirement Ages	Percent
55	4%	55	4%	63	22%
56	4%	56	5%	64	25%
57	4%	57	5%	65	40%
58	4%	58	5%	66	25%
59	5%	59	5%	67	25%
60	6%	60	5%	68	25%
61	13%	61	20%	69	25%
		62	40%	70	100%

Those Not Eligible for Unreduced Retirement and hired on or after November 1, 2011

Regular Employees		Department of Corrections			
Retirement Ages	Percent	Retirement Ages	Percent	Retirement Ages	Percent
60	5%	60	7%	66	25%
61	6%	61	20%	67	23%
62	6%	62	20%	68	22%
63	6%	63	20%	69	21%
64	13%	64	20%	70	100%
		65	40%		

Schedule 2C

Percent of Eligible Active Members Retiring Within Next Year
Department of Corrections Members With More Than 20 Years of Service

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

2021

TOGETHER

Statistics brings TOGETHER data as a context for understanding previous and current years. APART and without context, statistics have little meaning. However, TOGETHER and with context, statistics provide a decision-making tool based on historical performance.

STATISTICAL

APART

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	
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
2013	68,200,616	269,994,831	804,177,712	502,636,899	4,612,783	14,645,400	620,478,077
2012	66,299,570	262,710,009	154,692,436	484,309,893	4,758,636	14,331,714	(19,698,228)

Schedule of Revenue by Source

Year Ended June 30,	Member Contributions	Employer Contributions Dollars	Employer Contributions % of Annual Covered Payroll	Investment Income (Loss)	Total
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
2013	68,200,616	269,994,831	15.93	804,177,712	1,142,373,159
2012	66,299,570	262,710,009	15.60	154,692,436	483,702,015

Schedule of Expenses by Type

Year Ended June 30,	Benefit Payments	Administrative Expenses	Withdrawals	Total
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
2013	502,636,899	4,612,783	14,645,400	521,895,082
2012	484,309,893	4,758,636	14,331,714	503,400,243

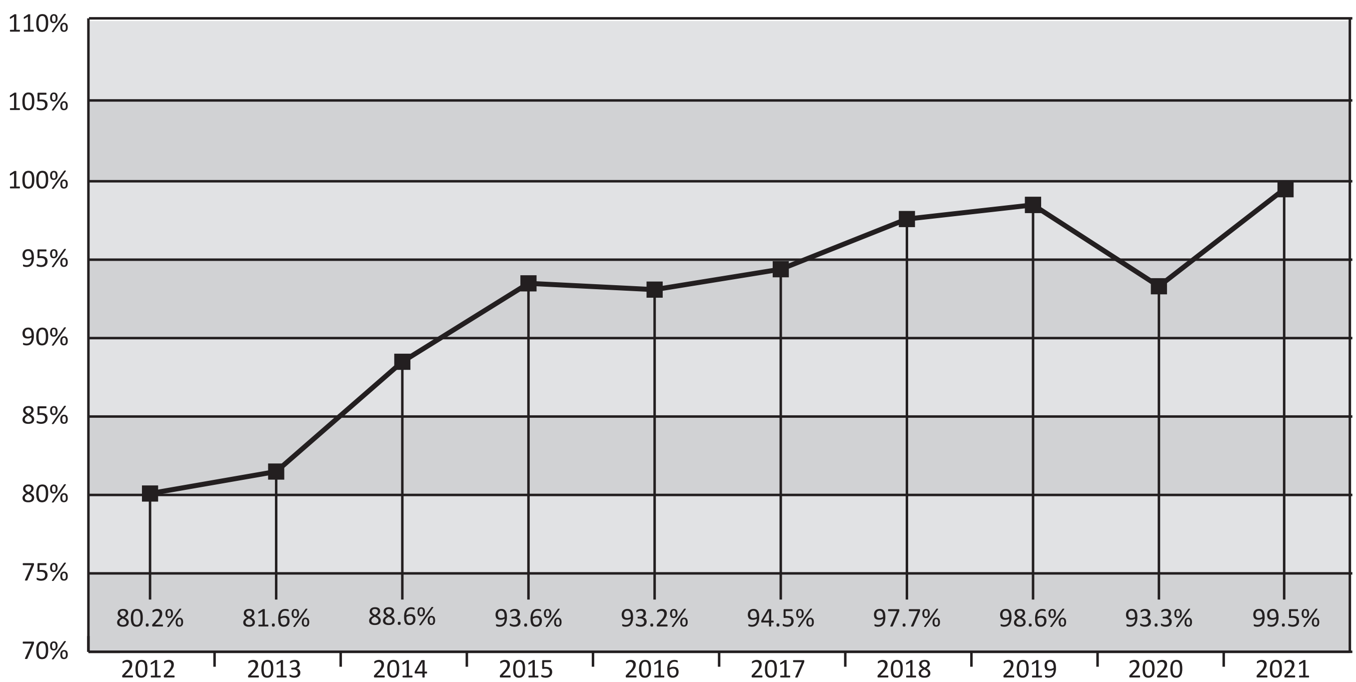
Schedule of Benefit Payments and Refunds by Type

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
2021	$ 656,256,513	$ 16,578,207	$ 6,446,243	$ 7,293,815	$ 2,222,261	$ 1,215,103	$ 73,103	$690,085,245
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
2013	480,885,816	17,325,263	4,425,820	10,423,136	3,191,104	897,727	133,433	517,282,299
2012	462,439,623	17,279,429	4,590,841	11,225,699	2,260,790	725,434	119,791	498,641,607

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
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
2013	(1.0)	22.7	13.9	12.0
2012	11.5	4.1	(12.5)	2.4

Schedule of Retired Members by Type of Benefit

June 30, 2021

Amount of Monthly Benefit	Number of Retirees	Type of Retirement 1	2	3	4	5	Option Selected 1	2	3	4
$1 – 1,000	14,950	8,362	3,003	2,392	874	319	8,336	2,929	3,447	238
1,001 – 2,000	11,925	9,828	526	1,157	407	7	6,592	2,055	3,115	163
2,001 – 3,000	5,975	5,554	51	342	28	-	3,099	1,111	1,654	111
3,001 – 4,000	2,113	1,962	5	144	2	-	1,030	350	703	30
4,001 – 5,000	807	772	5	30	-	-	391	141	265	10
Over 5,000	581	563	4	14	-	-	291	92	192	6
Totals	**36,351**	**27,041**	**3,594**	**4,079**	**1,311**	**326**	**19,739**	**6,678**	**9,376**	**558**

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, 2021, there are 6,133 former members with deferred future benefits.

Schedule of Average Benefit Payments

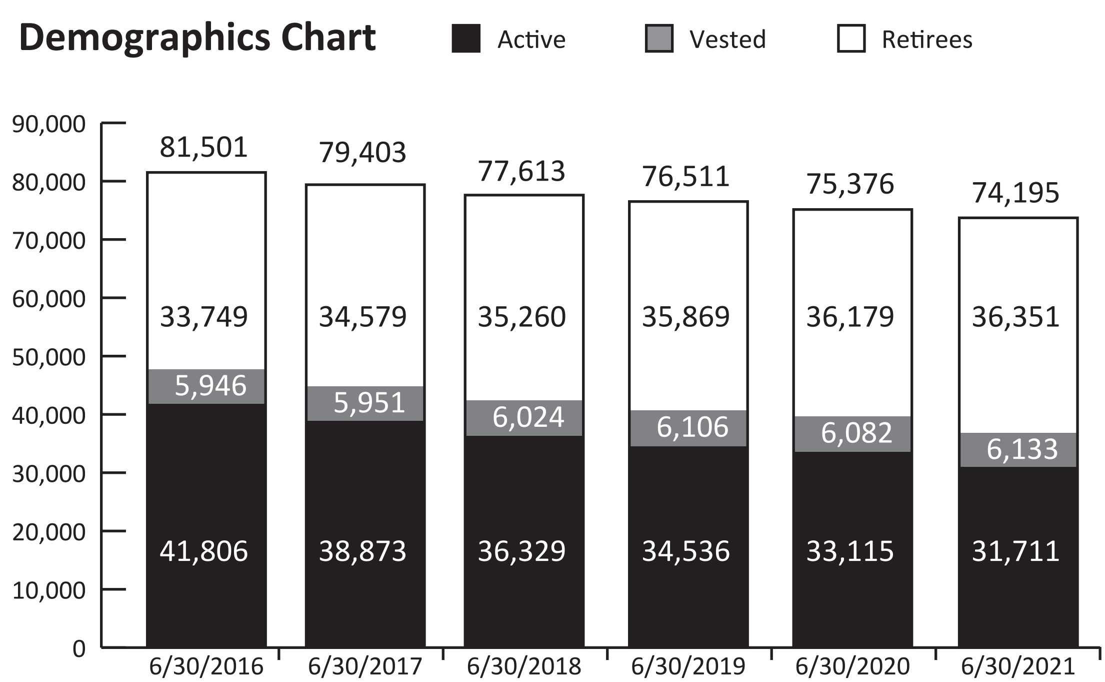
Retirement Effective Dates	Years of Credited Service						
July 1, 2011 to June 30, 2021	0 to 5	6 to 10	11 to 15	16 to 20	21 to 25	26 to 30	31+
Period 7/1/11 to 6/30/12							
Average Monthly Benefit	$ 95	$ 456	$ 671	$ 1,023	$ 1,612	$ 2,126	$ 2,866
Average Final Average Salary	$ 1,590	$ 2,824	$ 3,006	$ 3,078	$ 3,854	$ 3,869	$ 4,218
Number of Active Retirees	1	252	286	297	291	281	273
Period 7/1/12 to 6/30/13							
Average Monthly Benefit	$ 193	$ 462	$ 745	$ 1,172	$ 1,663	$ 2,204	$ 3,031
Average Final Average Salary	$ 1,928	$ 2,859	$ 3,068	$ 3,644	$ 3,664	$ 3,838	$ 4,214
Number of Active Retirees	1	259	343	261	324	294	272
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

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
2021	20, 471	64.6 %
2020	22,467	77.8
2019	23,610	78.4
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
2013	32,671	75.5
2012	32,403	76.1

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
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
Health 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
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
Ordinance 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
Quartz Mountain Arts and Conference Center Nature Park
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
Cotton County
Craig County
Creek County
Creek County Rural Water District #3

Participating Employers (continued)

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-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, 2021	Number	Amount of Annual Benefit
Members receiving benefits		
Retired	30,637	$ 592,654,423
Surviving spouses	4,403	54,390,425
Disabled	1,311	13,966,182
Total	**36,351**	**$ 661,011,030**
Members with deferred benefits		
Vested terminated	2,620	$ 28,733,517
Assumed deferred vested members (estimated benefits)	3,513	36,630,168
Total	**6,133**	**$ 65,363,685**

		Average		
Statistics for	**Number**	**Age**	**Service**	**Earnings**
Active members as of July 1, 2020				
Continuing	30,012	48.7	12.7	$ 47,295
New	3,103	38.4	2.2	27,755
Total	**33,115**	**47.7**	**11.7**	**$ 45,464**
Active members as of July 1, 2021				
Continuing	28,839	48.9	13.0	$ 49,007
New	2,872	37.9	2.0	27,034
Total	**31,711**	**47.9**	**12.0**	**$ 47,017**

Distribution of Retirees and Beneficiaries

	Number			Annual Benefits		
Age	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**
Under 50	104	96	200	$ 1,858,261	$ 1,118,611	$ 2,976,872
50-55	212	169	381	5,180,479	3,503,429	8,683,908
55-60	773	848	1,621	19,569,395	19,347,515	38,916,910
60-65	1,680	2,605	4,285	39,205,525	52,515,077	91,720,602
65-70	3,167	4,801	7,968	64,216,173	88,389,293	152,605,466
70-75	3,482	4,862	8,344	67,577,828	83,671,994	151,249,822
75-80	2,574	3,590	6,164	47,566,162	56,292,829	103,858,991
80-85	1,584	2,428	4,012	29,322,728	34,775,321	64,098,049
85-90	768	1,460	2,228	12,235,369	19,279,875	31,515,244
90-95	291	617	908	4,488,766	8,047,738	12,536,504
95-100	47	166	213	818,274	1,752,119	2,570,393
Over 100	5	22	27	45,563	232,706	278,269
Total	**14,687**	**21,664**	**36,351**	**$ 292,084,523**	**$ 368,926,507**	**$ 661,011,030**

Summary of Active Members

Age and years of credited service
Earnings tabulated are average rates of pay as of July 1, 2021

	Years of Service									
Age	**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	982	14								**996**
Average Pay	$26,916	$35,529								**$27,037**
25 to 29	1,154	461	8							**1,623**
Average Pay	$31,448	$41,622	$38,965							**$34,375**
30 to 34	1,013	1,469	254	5						**2,741**
Average Pay	$32,752	$45,476	$48,448	$55,202						**$41,066**
35 to 39	877	1,403	953	235	9					**3,477**
Average Pay	$32,318	$47,493	$53,788	$54,207	$48,939					**$45,848**
40 to 44	644	1,301	931	745	191	1				**3,813**
Average Pay	$32,792	$47,240	$53,210	$57,784	$56,465	$64,400				**$48,784**
45 to 49	560	996	811	680	610	146	1			**3,804**
Average Pay	$33,279	$46,752	$51,973	$55,694	$58,759	$59,951	$53,850			**$49,914**
50 to 54	541	1,061	807	706	654	402	178	4		**4,353**
Average Pay	$35,240	$45,230	$49,622	$53,396	$55,679	$59,336	$62,704	$62,506		**$49,730**
55 to 59	459	913	731	665	633	411	405	146	17	**4,380**
Average Pay	$33,830	$43,824	$47,730	$50,766	$53,484	$54,356	$63,078	$64,540	$60,756	**$49,404**
60 to 64	374	784	676	644	527	351	334	243	131	**4,064**
Average Pay	$34,787	$45,160	$49,169	$50,286	$52,582	$55,461	$60,501	$63,483	$60,181	**$50,377**
65 to 69	154	361	329	242	211	139	128	56	86	**1,706**
Average Pay	$33,459	$45,110	$47,697	$53,698	$52,899	$57,569	$60,178	$68,045	$62,216	**$50,500**
70 & up	107	155	131	121	85	47	37	31	40	**754**
Average Pay	$27,446	$48,290	$50,477	$49,548	$50,816	$61,113	$63,721	$58,486	$55,996	**$48,583**
Total	**6,865**	**8,918**	**5,631**	**4,043**	**2,920**	**1,497**	**1,083**	**480**	**274**	**31,711**
Average Pay	**$32,002**	**$45,786**	**$50,798**	**$53,615**	**$54,976**	**$57,015**	**$61,893**	**$64,006**	**$60,245**	**$47,017**

Oklahoma Public Employees Retirement System
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