

# Comprehensive Annual Financial Report For the Fiscal Years Ended June 30, 2020 and 2019

For the Fiscal Years Ended June 30, 2020 and 2019

Oklahoma Police Pension and Retirement System
A Component Unit of the State of Oklahoma

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# Oklahoma Police Pension and Retirement System

#### **MISSION**

To provide secure retirement benefits for members and their beneficiaries.

#### **VISION**

To be the best State Retirement System in Oklahoma through outstanding communication, education, customer service and financial stability.

#### **VALUES AND BEHAVIORS**

The Oklahoma Police Pension and Retirement System values its <u>members</u>, both active and retired, and the important contributions they make <u>protecting the citizens</u> of Oklahoma.

Expect the OPPRS <u>staff</u> to exhibit integrity, ethical conduct, professionalism and a <u>commitment to</u> <u>superior performance</u> through teamwork, communication, mutual respect and cooperation driven to produce results.

Effectively <u>communicate</u> new statute and rule changes to municipalities, members and staff. Use technology, such as the OPPRS website, to provide information in a timely manner.

Use every opportunity to continually **educate** members, municipalities, the OPPRS board and staff.

Utilize the most current **technology** to manage and operate the OPPRS.

Provide every member a forum for timely and fair <u>due process</u> regarding applications and appeals.

Strive to maintain <u>financial stability</u> by actively managing a broadly diversified investment portfolio designed to cover the current and future cost of benefits.

#### **GOALS**

Provide exceptional communication and education to our membership.

Adopt new technology that can be effectively and efficiently utilized to manage the OPPRS.

Encourage teamwork and training to provide workflow continuity as staffing evolves.

Support the Oklahoma State Legislature regarding laws impacting the OPPRS and its members.



# **Oklahoma Police Pension and Retirement System**

A Component Unit of the State of Oklahoma

# **Comprehensive Annual Financial Report**

For the Fiscal Years Ended June 30, 2020 and 2019

**Ginger Sigler** 

**Executive Director** 

Prepared by the Finance Department of the Oklahoma Police Pension and Retirement System

**Deric Berousek** 

**Chief Financial Officer** 

**Ann Burrows** 

Comptroller

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# Oklahoma Police Pension and Retirement System 2020 Comprehensive Annual Financial Report

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Introductory Section



# OKLAHOMA POLICE PENSION & RETIREMENT SYSTEM

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#### Letter of Transmittal

November 30, 2020

To the Board of Trustees and Members of the Oklahoma Police Pension and Retirement System:

We are pleased to submit the Comprehensive Annual Financial Report (CAFR) of the Oklahoma Police Pension and Retirement System (OPPRS) for the fiscal years ended June 30, 2020 and June 30, 2019. The objective of this report is to present a concise and complete picture of the Plan's financial, actuarial and investment results.

Responsibility for the accuracy of data, as well as the completeness and fairness of the presentation of this report, rests with the OPPRS management. Management relies on a comprehensive framework of internal controls to provide a reasonable, but not absolute, assurance that the financial statements are free of material misstatements. Management has established internal controls to protect the assets of OPPRS from loss, theft, or misuse, and continually reviews the control structure to ensure that the costs are reasonable in relation to the benefits provided.

The basic financial statements are prepared in accordance with generally accepted accounting principles as promulgated by the Governmental Accounting Standards Board. Finley & Cook, PLLC, has audited the financial statements included in this report and issued an unmodified opinion on the financial statements for the years ended June 30, 2020 and 2019, respectively. The Independent Auditors' Report is located at the front of the financial section within this report.

Management's Discussion and Analysis (MD&A) immediately follows the Independent Auditors' Report and provides a narrative introduction, overview and analysis of the basic financial statements. The MD&A compliments this letter of transmittal and should be read in conjunction with it.

#### Profile of the System

The Oklahoma Police Pension and Retirement System (the "System") was established by legislative act and became effective on January 1, 1981. The System is administrator of a multi-employer, cost-sharing defined benefit pension plan that provides participants with retirement, death, and disability benefits as well as a deferred option plan (the "Deferred Option"), as established by the State of Oklahoma. These plans are considered a single plan for financial reporting purposes. The System is a component unit of the State of Oklahoma financial reporting entity, and is combined with other similar defined benefit pension trust funds to comprise the fiduciary-pension trust funds within the State's financial reports. The System covers substantially all police officers employed by the 147 participating municipalities and state agencies within the State of Oklahoma. The mission of the System is to provide secure retirement benefits for the members of the System and their beneficiaries.

The Oklahoma Police Pension and Retirement Board is comprised of thirteen (13) members. Seven Board members are elected by members of the System (six are active police officers, and one is a retired member). One Board member is appointed by the Governor, one by the Speaker of the House, one by the President Pro Tempore of the Senate and one by the President of the Oklahoma Municipal League. The two remaining Board members are the State Insurance Commissioner or the Commissioner's designee and the Director of the Office of Management and Enterprise Services or the Director's designee.

The Oklahoma Police Pension and Retirement Board of Trustees (the "Board") is responsible for the operation, administration and management of the System. The Board also determines the general investment policy of the System's assets.

#### Revenues and Funding

A pension plan is considered well funded when it has sufficient reserves to meet all expected future obligations to its plan members. A pension plan must also have revenue sources sufficient to keep pace with future obligations. The primary sources of revenue for the System are member contributions, employer contributions, dedicated revenue from the State of Oklahoma, and investment income. In fiscal 2020 contributions increased by \$3.9 million to \$111.8 million on continued salary strength. In fiscal 2019, contributions increased \$3.9 million to \$107.9 million due to improving salaries. Investment gains in fiscal 2020 were hampered by weak performance in value and international equity exposures, returning \$55.8 million for the year. Investment returns were moderate in fiscal 2019 with an investment gain of \$104.9 million due to reduced equity returns. Modest equity returns, primarily in international and value equity components in 2020 combined with a positive fixed income environment produced lackluster investment returns for fiscal 2020 and 2019, adding just over \$160 million in gains for the 2 year period.

The System's funded status declined in fiscal 2020 due to a COLA passed by the legislature during the 2020 session. Lower than expected returns combined with the COLA dropped the funded status to 100.8% from 102.5% in the previous year. The System's funded status was flat in 2019, dropping slightly to 102.5% from 102.8% in 2018. The 2019 change in the funded status of the plan was due primarily to lower than expected growth in the System's investments over the last year combined with steady normal costs. The System had unamortized deferred actuarial losses of \$135.6 million and \$58.3 million at the end of fiscal 2020 and fiscal 2019, respectively, up from the \$23 million at the end of fiscal 2018 which benefited from strong investment returns realized over the prior 2 years.

The System's primary expenses are the payment of member retirement benefits. These payments include normal retirement benefits, refunds, deferred option payments and death benefits. The System also incurs administrative expenses in the form of employee salaries and benefits, legal fees, investment fees, data processing fees, and medical and travel costs. In fiscal 2020 total expenses rose 5.0% to \$165.2 million on increased benefit and deferred option payments. In fiscal 2019 total expenses rose 11.4% to \$157.4 million due to a substantial increase in deferred option benefits from the prior year. In fiscal 2020 refund payments increased substantially from 2019 due to a higher than typical number of unvested members exiting the System. Administrative expenses rose 6.5% to \$2.0 million in fiscal 2020 due primarily to increased legal costs related to portfolio adjustments. Refunds and administrative expenses increased slightly in fiscal 2019 over fiscal 2018, due primarily to variability in the number and amount of refund payments being made.

#### Investments

In order to fulfill their fiduciary responsibilities, the Board retains an investment consultant to ensure that the assets of the system are being adequately invested at all times, and to assist with the development and implementation of a prudent asset allocation to maximize investment results while mitigating excessive risk. The Board also utilizes its investment consulting firm to provide performance measurement of the portfolio, and this firm also compares the management of funds and the investment returns against other similar funds and trusts to ensure the effectiveness of implemented investment strategies.

The primary objective of the System's investment strategy is to obtain the highest maximum return on invested assets with an acceptable level of risk. The cornerstone of the investment strategy is to identify, locate and purchase investments that complement the existing portfolio. New portfolio additions are generally anticipated to offer strong investment performance while improving the diversification of the portfolio. Likewise, investments that have underperformed their expectations, or that no long fit within the allocation model, are sold as it is prudent to do so. Additionally, the Board periodically reviews the strategic asset allocation to ensure that expected return and risk (as measured by standard deviation) is consistent with the System's long-term objectives and tolerance for risk. Within this investment structure, the System had a net yield of 1.93% for fiscal 2020, significantly below prior year returns, due primarily to the impact of COVID-19. The System had a net yield on assets of 4.24% for fiscal 2019, lagging the solid 8.34% return of 2018. These returns over the long-term are slightly below the 7.5% actuarial expectation, with the System achieving a 7.26% average annual return over the last 10 years. A defensive posture that seeks to mitigate risk as much as possible due to the System's strong funded position typically causes performance to lag somewhat in aggressively up markets. The Board has determined that certain components of the portfolio have lagged significantly over the last few years and were removed from the portfolio in fiscal 2020. The Board began making several allocation adjustments in the fiscal 2020 period to provide greater upside capture when markets are strong while still working to mitigating losses in down markets.

#### Legislation and Outlook

The following plan provision changes pertaining to the Oklahoma Police Pension and Retirement System were enacted by the Oklahoma Legislature during the 2020 and 2019 legislative sessions:

#### 2020

**House Bill 3330** - Provides that members who are injured in the performance of duties as a police officer by a violent act will be eligible for the State Board to assess that the member has sustained a one-hundred-percent disability for the determination of a benefit. HB 3330 further defines a violent act as "a violent attack on the member by means of a dangerous weapon, including, but not limited to, a firearm, knife, automobile, explosive device, or other dangerous weapon.

House Bill 3350 - Provides a cost-of-living adjustment (COLA) to any person receiving a benefit from the System and who continues to receive a benefit on or after July 1, 2020, based on the following retirement dates: Zero (0%) if the person was retired 2 years or less on July 1, 2020; Two (2%) if the person has been retired for at least 2 years but less than 5 years as of July 1, 2020 and; Four (4%) if the person has been retired for 5 years or more on July 1, 2020. This COLA is offset by any increase in benefits a person received pursuant to repealed Section 50-120 of Title 11 of the Oklahoma Statutes after June 30, 2008.

#### 2019

House Bill 2269 - Provides that participants in the Deferred Option Plan (DOP) can name a designated recipient; if there is no such designation, the surviving spouse (having been married to the participant for the 30 continuous months preceding death) will be the eligible recipient. The 30 month requirement does not apply in the event of a duty related death. If neither a named recipient nor a surviving spouse is an eligible recipient, payment will be made to the estate of the participant. HB 2269 further provides that the Council on Law Enforcement and Training (CLEET) will grant the Board access to records regarding actively working police officers in participating agencies and municipalities. Lastly HB 2269 allows for the final benefit payment due a member in the month they are deceased to be paid to a successor-in-interest provided it is less than the limits set in Title 58 § 393 of the state statutes.

In fiscal 2020 the System had several significant events occur. During the 2020 legislative session a tiered cost-of-living-adjustment (COLA) statute was passed for most System retirees. This COLA (House Bill 3350) was the first permanent change in member benefits since 2008, increasing a member's monthly retirement amount by either 2% or 4% depending on their retirement date. Regarding investments, the Board made several significant allocation changes including reducing exposure to long/short equity from 15% to 10% and increasing the allocation to private equity from 10% to 15%.

These portfolio moves take a period of time to implement and may take 2 to 4 years to fully reach the new allocation targets. The Board also increased the core real estate allocation to 10% while eliminating exposure to commodities which have lagged significantly for an extended period. It is anticipated that these portfolio changes will improve the upside capture when markets are strong while continuing to provide protection in challenging or down markets. Administratively the System was stable for the year even as the challenges of COVID-19 required work from home and other adjustments to accommodate the board and System members through online mediums.

#### 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 Police Pension and Retirement System for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2019.

To earn this certificate an entity must publish a comprehensive annual financial report that conforms to GFOA's program requirements and standards. The CAFR must be efficiently and effectively presented, and must satisfy all legal requirements as well as conform to generally accepted accounting principles.

The GFOA Certificate of Achievement only covers a one year period. The Oklahoma Police Pension and Retirement System received its first Certificate for the fiscal year ended June 30, 2011. We believe this report continues to meet GFOA's Certificate program requirements, and we are submitting it to them.

The preparation of this report would not have been possible without the efficient and dedicated service of the entire OPPRS staff. We would also like to credit the Board of Trustees for their unwavering efforts to maintain the highest level of professionalism in the financial management of the Oklahoma Police Pension and Retirement System.

Respectfully submitted,

Ginger Sigler

**Executive Director** 

Deric Berousek

Chief Financial Officer

# **OPPRS Board of Trustees**



Chris Cook Chairman District 1



Thomas Cooper Vice Chairman District 3



Rob Groseclose
District 2



Jeff Russell
District 4



Ryan Woods
District 5



John George
District 6



Jeff Cealka District 7



**Greg Wood**Governor Appointee



**Timothy Foley**Speaker of the House of
Representatives Appointee



Chris Chandler Senate President Pro Tempore Appointee



**Mike Brown** Oklahoma Municipal League Appointee

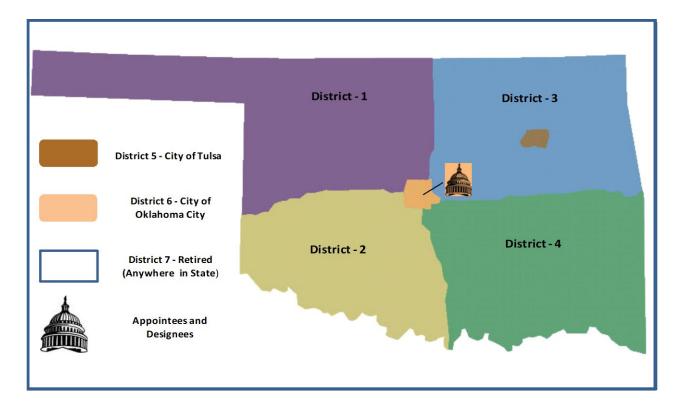


Antuanya "Bo" DeBose
Designee of the State
Insurance Commissioner



**Brandy Manek**Designee-Director of the
Office of Management
and Enterprise Services

# Oklahoma Police Pension Board - Districts, Appointees and Designees



District 1 Board Member- North of I-40 and west of I-35, excluding any area comprising Oklahoma City.

District 2 Board Member- South of I-40 and west I-35, excluding any area comprising Oklahoma City.

District 3 Board Member- North of I-40 and east of I-35, excluding any area comprising Oklahoma City or Tulsa.

District 4 Board Member- South of I-40 and east of I-35, excluding any area comprising Oklahoma City.

District 5 Board Member - Comprising the area within the City of Tulsa.

District 6 Board Member - Comprising the area within the City of Oklahoma City.

District 7 Board Member - The entire area of the State, but must be retired.

8<sup>th</sup> Member of the Board - Appointed by the Speaker of the House of Representatives.

9<sup>th</sup> Member of the Board - Appointed by the President Pro Tempore of the Senate.

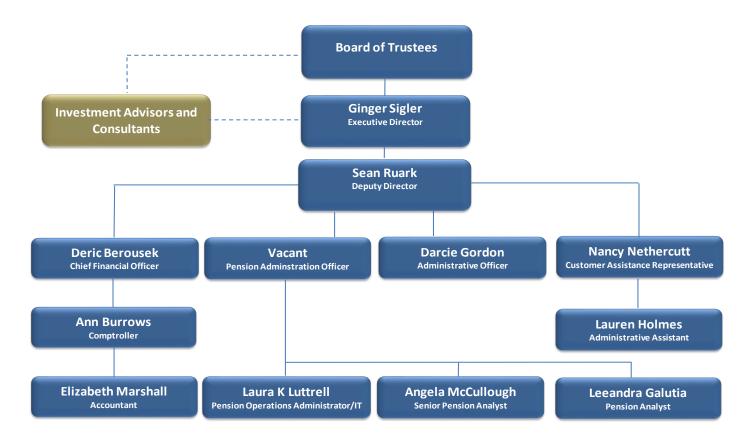
10<sup>th</sup> Member of the Board - Appointed by the Governor.

11<sup>th</sup> Member of the Board - Appointed by the President of the Oklahoma Municipal League.

12<sup>th</sup> Member of the Board - The State Insurance Commissioner or the Commissioner's designee.

13<sup>th</sup> Member of the Board - The Director of Management and Enterprise Services (formerly the Office of State Finance), or the Director's designee.

# Organization of the Oklahoma Police Pension and Retirement System



# Professional Advisors and Consultants\*

#### <u>Actuary</u>

# Cavanaugh Macdonald Consulting 3906 Raynor Parkway, Suite 106 Bellevue, NE 68123

# Independent Auditor

Finley & Cook, PLLC 1421 E. 45th Street Shawnee, OK 74804

#### **Property Management Services**

Wiggin Properties, LLC 5801 N. Broadway, Suite 120 Oklahoma City, OK 73118

#### <u>Legal Services (Tax and Pensions)</u>

**Davis, Graham & Stubbs, LLC** 1550 Seventeenth Street, Suite 500 Denver, CO

#### **Investment Consultant**

Asset Consulting Group, LLC 231 S. Bemiston, 14th Floor St. Louis, MO 63105

#### Master Trustee (Custodian)

Bank of New York Mellon 135 Santilli Highway, 026-0313 Everett, MA 02149

#### <u>Legal Services (Pensions and Investments)</u>

Phillips Murrah, P.C.

101 N. Robinson, Corporate Tower 13th Floor Oklahoma City, OK 73102

<sup>\* -</sup> The schedule of Investment Expenses and Professional Consultant Fees in the Other Supplementary Information Section and the Schedule of Investment Fees (pg. 94) & Broker Commissions (pg. 95) in the Investment Section contain additional information regarding professional advisors and consultants.



# Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

# Oklahoma Police Pension & Retirement System

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2019

Christopher P. Morrill

Executive Director/CEO



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**Financial Section** 



#### INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of the Oklahoma Police Pension and Retirement System

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Oklahoma Police Pension and Retirement Plan (the "Plan"), administered by the Oklahoma Police Pension and Retirement System, which is a part of the State of Oklahoma financial reporting entity, which comprise the statements of fiduciary net position as of June 30, 2020 and 2019, 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; 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.

#### Auditors' 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' 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 auditors consider 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 opinion.

(Continued)

#### **INDEPENDENT AUDITORS' REPORT, CONTINUED**

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Plan as of June 30, 2020 and 2019, and the changes in fiduciary net position of the Plan for the years then ended in accordance with accounting principles generally accepted in the United States.

#### **Other Matters**

#### Required Supplementary Information

Accounting principles generally accepted in the United States require that the management's discussion and analysis on pages 18 through 23 and the schedule of changes in the employers' net pension (asset) liability, the schedule of employers' net pension (asset) liability, the schedule of contributions from employers and other contributing entities, the schedule of investment returns, and the notes to the required supplementary information in Exhibits I, II, III, IV, and V 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, 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 audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Plan's basic financial statements. The introductory section, the investment section, the actuarial section, the statistical section, and Schedules I, II, and III are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplementary information in Schedules I, II, and III 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 audits 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. In our opinion, the supplementary information in Schedules I, II, and III is fairly stated in all material respects in relation to the financial statements as a whole.

(Continued)

Finley + Cook, PLLC

#### **INDEPENDENT AUDITORS' REPORT, CONTINUED**

#### Other Matters, Continued

Other Information, Continued

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

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated September 10, 2020, on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Plan's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Plan's internal control over financial reporting and compliance.

Shawnee, Oklahoma September 10, 2020

# **Management's Discussion and Analysis**

This discussion and analysis is presented by the management of the Oklahoma Police Pension and Retirement System, administrator of the Oklahoma Police Pension and Retirement Plan (collectively the "System" or "OPPRS"). This narrative and analysis offers a summary review of the System's financial activity for the fiscal years ended June 30, 2020, 2019 and 2018. The letter of transmittal preceding this narrative and the System's financial statements which follow should be referred to in conjunction with this analysis.

#### **Financial Highlights**

For the Fiscal Year Ended June 30,							
	(;	amounts in thousar	nds)		% Change	% Change	% Change
	2020	2019	2018		2020 from 2019	2019 from 2018	2018 from 2017
Fiduciary Net Position	\$2,621,311	\$2,618,857	\$2,563,446		0.1%	2.2%	7.0%
Contributions:							
Participating Cities	44,226	42,154	40,135		4.9%	5.0%	3.2%
Plan members	27,310	26,173	24,747		4.3%	5.8%	3.5%
Insurance Pemium Tax	40,295	39,559	39,028		1.9%	1.4%	13.8%
Net Investment Income (loss)	55,808	104,882	205,439		-46.8%	-48.9%	-15.3%
Benefits paid, including refunds and							
deferred option benefits	163,193	155,486	139,563		5.0%	11.4%	-3.1%
Change in Fiduciary Net Position	2,454	55,411	168,065		-95.6%	-67.0%	-13.2%
Funded Ratio of the Plan	100.8%	102.5%	102.8%		-1.7%	-0.3%	1.0%
Total Plan Membership	9,964	9,704	9,448		2.7%	2.7%	2.5%

<sup>\* - (</sup>N/M) Percentage change is  $\underline{n}\text{ot }\underline{m}\text{eaningful}$  when prior period comparative amount is negative.

- In fiscal year 2020 returns were significantly affected, particularly value and international positions, due to the disruptions from COVID-19. For fiscal 2020 fiduciary net position increased by \$2.5 million or .01% to \$2.62 billion. During the 2019 fiscal year, returns were moderate across most domestic equity investments, modestly increasing fiduciary net position by \$55.4 million, or 2.2%, to \$2.62 billion. System fiduciary net position increased by \$168.1 million or 7% to reach \$2.56 billion in 2018. Fiscal 2018 experienced strong growth in assets due to double digit investment returns, primarily on the strength of domestic equity markets.
- In fiscal 2020 a COLA bill passed by the state legislature and lower than expected investment returns reduced the System's funded position to 100.8%, a decrease of 1.7%. In fiscal 2019, due to the amortization of some actuarial losses combined with moderate returns, the System's actuarial funded ratio decreased by .3% to 102.5%. In fiscal 2018 the System's actuarially funded ratio increased by 1.0% to a new high of 102.8% due to slightly lower than expected liability increases for the year. Overall, with an actuarially funded ratio of 100.8%, the plan remains financially sound and exceptionally well positioned to meet future liabilities.
- In fiscal 2020 total System membership increased by 260 net members, or 2.7%, showing normal increases and attrition. For fiscal 2019 the System's total membership increased by 256 on a net basis to 9,704 members, relatively consistent growth as in prior years. The System's net membership increased by 228 members in fiscal 2018, a slight increase over the 171 net membership increase in 2017, with both years matching expectations. Member and employer contributions in fiscal 2020

continued to show strength in both employment and salaries, increasing 4.3% and 4.9%, respectively. In fiscal 2019 contributions from members and employers increased 5.8% and 5.0%, respectively, due to strong employment and strengthening salaries. Fiscal 2018 contributions from members and employers increased 3.5% and 3.2%, respectively, on par with typical historic trends. The State insurance premium tax collections increased modestly in fiscal 2020 and fiscal 2019, rising 1.9% and 1.4%, respectively, over 2018 contributions. The state insurance tax collections are generally considered a reasonable proxy of the strength of the economy. Additionally, the state legislature altered the funding percentage for fiscal 2021 and 2022 to address budgetary issues resulting from COVID-19. OPPRS will receive 9.8% of the insurance premium tax for the majority of 2021, 10.5% for 2022, 15.4% for fiscal 2023-2027, ultimately returning to 14% in fiscal 2028.

#### **Overview of the Financial Statements**

This discussion and analysis introduces the System's basic financial statements. They are comprised of 1) *The Statement of Fiduciary Net Position*, 2) *The Statement of Changes in Fiduciary Net Position*, and 3) *Notes to the Financial Statements*. This report also includes required supplementary information and other supplemental schedules. The System is a defined benefit, cost-sharing, multi-employer pension plan and is a component unit of the State of Oklahoma. The System, combined with other similar plans, form the State of Oklahoma's fiduciary pension trust funds. The financial statements are presented using the flow of economic resources measurement focus and the accrual basis of accounting, similar in most regards to that of private business.

The System's Statement of Fiduciary Net Position presents the ending balance of assets and liabilities at a specific moment in time. Assets of the system include cash and cash equivalents, investments, receivables and capital assets. System liabilities are primarily accounts and benefits payable. The difference between assets and liabilities produce a "net position" balance representing the fair value of assets held in trust to pay future benefits. Net positions shown increasing over time indicate improving financial conditions within the System, while a decrease in net position represents a decline in financial condition.

The Statement of Changes in Fiduciary Net Position details the sources of income and uses of resources that affected the System's financial performance for a specified period or periods. The System's primary income sources are from city and member contributions, a dedicated portion of the State of Oklahoma Insurance Premium Tax, investment gains or losses and investment income. Retirement benefits, investment charges and administrative costs are the primary expenses of the System.

The *Notes to the Financial Statements* immediately following the System's financial statements should be considered an integral part of the financial statements. The notes cover significant details about the System's financial structure and activities, providing a more complete understanding of the System's financial results.

A required supplementary information section follows the notes. It includes the schedule of changes in employers' net pension liability, schedule of employers' net pension liability, schedule of contributions from employers and other contributing entities, and the schedule of investment returns. These schedules offer a useful means of assessing the long-term changes in the System's assets and liabilities, total pension liabilities, changes in the Plan's net pension liability, and how effectively contributors to the System have met the actuarially determined contributions needed.

Other supplementary information contains several schedules that provide significant details regarding investment expenses, administrative expenses, and fees paid to consultants.

#### **Condensed Financial Analysis**

Condensed financial information for the System is presented in the following tables. This information provides a summary of the System's financial activity for the years ended June 30, 2020, 2019 and 2018.

#### **Condensed Summary of Fiduciary Net Position**

Cash and cash equivalents
Receivables
Investments, at fair value
Total Assets

Fiducian Net Desition

Other liabilities Total Liabilities

Contr

**Fiduciary Net Position** 

For the Fiscal Year Ended June 30,							
(amounts in thousands)							
	2020		2019			2018	
\$	37,594		\$	18,026		\$	38,434
	15,521			13,806			14,729
	2,642,338			2,591,932		2,514,904	
	2,695,453			2,623,764		2,568,06	
	74,142			4,907			4,621
	74,142		4,907				4,621
\$	2,621,311		\$	2,618,857			\$2,563,446

% Change	% Change	% Change
2020 from 2019	2019 from 2018	2018 from 2017
100.00	F2 40/	47.40/
108.6%	-53.1%	17.4%
12.4%	-6.3%	-4.3%
1.9%	3.1%	6.9%
2.7%	2.2%	7.0%
1410.9%	6.2%	-7.3%
1410.9%	6.2%	-7.3%
0.1%	2.2%	7.0%

#### **Condensed Summary of Changes in Fiduciary Net Position**

ibutions			

Benefits and refunds paid Deferred option benefits paid Administrative expenses Total Deductions

Net investment income Total Additions

Total Changes in Fiduciary Net Position

Beginning Fiduciary Net Position

Ending Fiduciary Net Position

 For the Fiscal Year Ended June 30,						
(amounts in thousands)						
2020		2019 2018		2018		
\$ 111,831		\$	107,886		\$	103,910
55,808			104,882			205,439
167,639			212,768			309,349
125,826			121,841			116,710
37,367			33,645			22,853
1,992			1,871			1,721
165,185			157,357			141,284
2,454			55,411			168,065
2,618,857			2,563,446			2,395,381
\$ 2,621,311		\$	2,618,857		\$	2,563,446

% Change	% Change	% Change
2020 from 2019	2019 from 2018	2018 from 2017
3.7%	3.8%	7.0%
-46.8%	-48.9%	-15.3%
-21.2%	-31.2%	-8.9%
3.3%	4.4%	3.8%
11.1%	47.2%	-27.8%
6.5%	8.7%	1.3%
5.0%	11.4%	-3.1%
-95.6%	-67.0%	-13.2%
2.2%	7.0%	8.8%
0.1%	2.2%	7.0%

#### **Analysis of Overall Financial Position and Results of Operations**

The System's net position remained static in fiscal 2020, increasing by \$2.5 million or .1%. COVID-19, combined with value and international equity underperforming impacted 2020 returns. Results in fiscal 2019 were moderate as well after a strong 2018, with net position increasing \$55.4 million, or 2.2%. This was the result of less than expected investment returns as the markets weathered a pullback in late 2018, followed by charging markets that offset some of the declines. Fiscal 2018 was a repeat of the prior year's strong results, increasing fiduciary net position by 7.0% to \$2.56 billion. Overall, all three years had marginal investment returns combined with stable benefit payments and expenses for the respective periods. Contributions increased in fiscal 2020 by 3.7% on strengthening salary increases. Contributions increased 3.8% overall in fiscal 2019 as salary increases started to show up in both member and employer contributions, rising 5.8% and 5.0% respectively from fiscal 2018. Contributions increased significantly in 2018, jumping 7.0% over the previous year. For fiscal 2020 and 2019 there were 3,912 and 3,815 members and beneficiaries receiving benefits,

<sup>\* - (</sup>N/M) Percentage change is <u>not meaningful</u> when a period's comparative amount is negative.

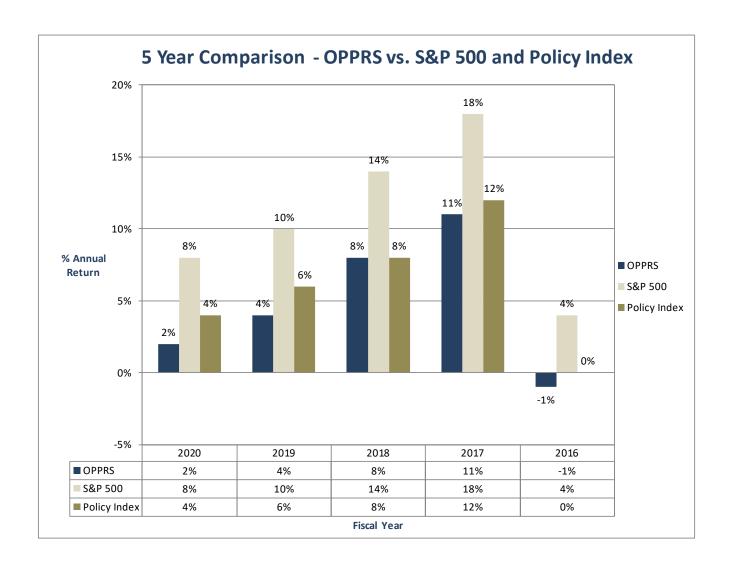
respectively. This was a net increase of 97 and 95 retirees, respectively, growing slightly faster than in prior years. Total benefit payouts and refunds for fiscal 2020 and fiscal 2019 were higher as well by 3.3% or \$126 million and 4.4%, or \$122 million, respectively. Increases for both years were normal and within expectations. In fiscal 2018, there were 3720 members receiving benefits, a net increase of 41 over 2017, with total benefit payouts of \$116.7 million, \$4.3 million higher than 2017. 2020 deferred option payouts increased 11.1% to \$37.4 million, a modest rise from the prior year. With a large jump in new net retirees, the deferred option payouts increased significantly in fiscal 2019, rising 47.2% to \$33.6 million. Deferred option payouts decreased significantly in 2018 to \$22.9 million, a 27.8% drop from the prior year on decreased retirements. Since deferred option payouts are individual retirement elections there can be large fluctuations from one year to the next.

The System is funded by contributions from participating cities and their police officers, a dedicated percentage of the State of Oklahoma's insurance premium tax, and returns generated by investing the System's assets. In fiscal 2020 contributions increased 3.7%, or \$4.0 million, to \$111.8 million on continued salary strength and increases. For fiscal 2019, contributions increased 3.8%, or \$4.0 million to \$107.9 million due to larger than normal increases in member and employer contributions. In fiscal 2018 contributions increased a substantial 7.0% or \$6.82 million due primarily to a 13.8% increase in the insurance premium tax collections. Presently the System receives 14% of the State's total insurance premium tax collected. The System received \$40.3 million, \$39.6 million, and \$39.0 million for the fiscal years ended June 30, 2020, 2019 and 2018, respectively. The system will receive reduced insurance premium tax allocations in fiscal 2021 and 2022 due to legislative budget adjustments made in fiscal 2020 to offset the effects of COVID-19.

Total benefit payments, including refunds and deferred options, increased 5% in fiscal 2020 to \$163.2 million after an 11.4% increase in fiscal 2019 to \$155.5 million. These increases were primarily due to higher retirement elections in both 2020 and 2019 that substantially increased deferred option payouts. Total benefits decreased a slight 3.1% in 2018 to \$139.6 million due to a 28% decrease in deferred option benefits paid out. Deferred option plan payments returned to a more normal pacing in 2020 and 2019 after a dip in retirements during 2018. Deferred option elections are highly variable and can change substantially from one year to the next.

Administrative expenses are composed primarily of payroll and related expenses for the employees of the System, legal and professional fees, data processing fees, medical and travel costs, and depreciation. In fiscal 2020 administrative costs increased \$121 thousand, or 6.5%, due primarily to increased legal costs related to investment contracts. 2019 administration costs increased 8.7%, or \$150 thousand, due primarily to increased legal, professional and information technology costs. 2018 administration costs increased a minimal 1.3% or \$22,000 over 2017 on relatively stable costs. Legal costs can vary significantly from year to year depending on the number of new investments in a given year. Administrative expenses were \$1.99 million, \$1.87 million, and \$1.72 million for fiscal years 2020, 2019 and 2018, respectively.

The System's net yield on average assets was approximately 1.93% for the fiscal year ended June 30, 2020, as most asset classes faced significant headwinds due to COVID-19. Domestic large cap and growth oriented funds recovered strongly after an early dip while international large cap and value focus funds lagged significantly. Core bonds outperformed during the fiscal year, returning 9.88% on declining interest rates. Since the System values its investments at fair value, increasing volatility in both local and global markets can have a significant impact on the net position and operating results of the System. The System's net yield on average assets as compared to the S&P 500 stock index, an unmanaged pool of domestic equities, and its policy index, a combination of unmanaged domestic and international equity indices, were as follows for the periods ended June 30:



The System has experienced moderate total return performance over the last 5 years, exceeding 8% in 2 of those years. The System's broad asset diversification policies have been out of favor in current markets while a heavy domestic equity focus has been amply rewarded. Although the System is directly impacted by overall stock market changes, investments are made based on the expectation of long-term performance and in the best interest of the System's members. With \$2.62 billion in assets allocated across a highly diversified range of investments, the System has the financial resources to maintain its current investment strategies while continually pursuing suitable investment options that will benefit its members.

#### **Other Matters**

As a matter of policy, the System attempts to stay fully invested at all times. Consequently, the System's Fiduciary Net Position could be negatively affected should global stock and bond market volatility increase, or should such markets encounter an extended period of decline.

#### **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 Executive Director or Chief Financial Officer, Oklahoma Police Pension

and Retirement System, 1001 N.W. 63<sup>rd</sup> Street, Suite 305, Oklahoma City, OK 73116-7335. Additional information may also be obtained by visiting the System's website located at <a href="https://www.OPPRS.ok.gov">www.OPPRS.ok.gov</a>.

### STATEMENTS OF FIDUCIARY NET POSITION

<i>June 30,</i>	2020	2019
	(Amounts in T	Thousands)
Assets		
Cash and cash equivalents	\$ 37,594	18,026
Receivables:		
Interest and dividends receivable	1,789	1,844
Contributions receivable from cities	2,844	2,156
Contributions receivable from participants	1,750	1,358
Insurance premium tax receivable	7,835	8,408
Receivable from brokers	1,303	40
Total receivables	15,521	13,806
Investments, at fair value:		
U.S. government securities	37,917	41,383
Domestic corporate bonds	217,356	176,870
International corporate bonds and bond funds	219,400	210,703
Domestic equities	659,372	644,061
International equities	399,687	378,081
Private equity—non-real estate	295,859	279,066
Low volatility hedge funds	164,679	181,141
Long/short hedge funds	229,943	374,278
Real estate—core and private equity	320,500	226,668
Commodities	22,799	75,381
Direct real estate—Columbus Square	4,100	4,300
Total investments, at fair value	2,571,612	2,591,932
Securities lending collateral	70,726	
Total assets	2,695,453	2,623,764
Liabilities		
Payable to brokers	2,505	428
Accounts payable	732	683
Deferred option benefits due and currently payable	179	3,796
Securities lending collateral payable	70,726	-
Total liabilities	74,142	4,907
Fiduciary net position restricted for pensions	\$ 2,621,311	2,618,857

See Independent Auditors' Report.

See accompanying notes to financial statements.

# STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Years Ended June 30,	2020	2019
	(Amounts in Th	ousands)
Additions		
Contributions:		
Cities	\$ 44,226	42,154
Plan members	27,310	26,173
Insurance premium tax	 40,295	39,559
Total contributions	 111,831	107,886
Investment income:		
From investing activities:		
Net appreciation in fair value of investments	54,283	104,266
Interest	9,267	7,720
Dividends	8,783	8,521
Other	 570	248
Total investment income	72,903	120,755
Less investment expense	 (17,147)	(15,873)
Income from investing activities	 55,756	104,882
From securities lending activities:		
Securities lending income	340	-
Securities lending expenses:		
Borrower rebates, net	(238)	-
Management fees	(50)	-
Income from securities lending activities	52	-
Net investment income	 55,808	104,882
Total additions	 167,639	212,768
Deductions		
Benefits paid	123,375	119,964
Deferred option benefits	37,367	33,645
Refunds of contributions	2,451	1,877
Administrative expenses	 1,992	1,871
Total deductions	 165,185	157,357
Net increase in net position	2,454	55,411
Net position restricted for pensions:	0.640.655	
Beginning of year	 2,618,857	2,563,446
End of year	\$ 2,621,311	2,618,857

See Independent Auditors' Report.

See accompanying notes to financial statements.

#### NOTES TO FINANCIAL STATEMENTS

June 30, 2020 and 2019

#### (1) <u>NATURE OF OPERATIONS</u>

The Oklahoma Police Pension and Retirement System (the "System") was established by legislative act and became effective on January 1, 1981. The System is the administrator of a multiple-employer, cost-sharing defined benefit pension plan that provides participants with retirement, death, and disability benefits and a deferred option plan (the "Deferred Option"), both established by the State of Oklahoma. These plans are considered a single plan for financial reporting purposes. The System is part of the State of Oklahoma financial reporting entity and is included in the State of Oklahoma's financial reports as a pension trust fund. The System covers substantially all police officers employed by the 147 participating municipalities and state agencies within the state of Oklahoma. The System administers the Oklahoma Police Pension and Retirement Plan (the "Plan"). For report purposes, the System is deemed to be the administrator of the Plan. The State of Oklahoma remits, through the Oklahoma Insurance Department, a portion of the insurance premium taxes collected by authority of the State. As a result of these contributions, the State is considered a non-employer contributing entity to the Plan.

The System is a part of the State of Oklahoma financial reporting entity, which is combined with other similar funds (multiple-employer, cost-sharing) to comprise the fiduciary-pension trust funds of the State of Oklahoma.

The Oklahoma Police Pension and Retirement System Board of Trustees (the "Board") is responsible for the operation, administration, and management of the System. The Board also determines the general investment policy of the System's assets. The Board is comprised of 13 members. Six members are active System members and represent specific geographic areas of the state. They must work for a police department physically located in the district they serve. The 7th district shall be represented by a retired member of the System and encompasses the entire state area. These elected members serve 3-year terms. The remaining six members are either governmental office holders or are appointed as follows: one by the Speaker of the House of Representatives, one by the President Pro Tempore of the Senate, one by the Governor, and one by the President of the Oklahoma Municipal League; the final two members of the Board are the State Insurance Commissioner or designee and the Director of the Office of Management and Enterprise services or designee. The appointees and office holders or designees all serve a 4-year term, with the governor appointee's term being coterminous with that office. appointees of the Board or designees of ex officio members should have either demonstrated professional experience in investment or funds management, demonstrated experience in the banking profession, be licensed to practice law in the state and have demonstrated professional experience in commercial matters, or be licensed by the Oklahoma Accountancy Board to practice in this state as a public accountant or a certified public accountant.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (1) <u>NATURE OF OPERATIONS, CONTINUED</u>

The System's participants at June 30 consisted of:

	2020	2019
Retirees and beneficiaries currently		
receiving benefits	3,912	3,815
Vested members with deferred benefits	161	158
Deferred Option plan members	2	4
	4,075	3,977
Active plan members:		
Vested	2,435	2,510
Nonvested	3,454	3,217
Total active plan members	5,889	5,727
Total members	9,964	9,704
Number of participating municipalities and		
state agencies	147	146

#### (2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

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

#### **Basis of Accounting**

The financial statements are prepared using 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 date. The financial statements are in conformity with provisions of Governmental Accounting Standards Board Statement No. 67, Financial Reporting for Pension Plans—an Amendment of GASB Statement No. 25 (GASB 67).

The Plan is administered by the System, a part of the State of Oklahoma financial reporting entity, which together with other similar pension and retirement funds comprises the fiduciary-pension trust funds of the State of Oklahoma. Administrative expenses are paid with funds provided by operations of the Plan.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### **Recent Accounting Pronouncements**

In June 2017, GASB issued Statement No. 87, *Leases* (GASB 87). GASB 87 provides accounting and reporting guidance for leases, effectively considering most leases, other than those for terms of less than one year, as capital leases. GASB 87 guides that lessees will recognize a lease liability at the outset of the lease, and an intangible right-to-use lease asset. The liability will be amortized as payments are made, and the asset will generally be depreciated over the shorter of the lease term or the service life of the asset. The Plan adopted GASB 87 on July 1, 2020, for the June 30, 2021, reporting year. The Plan does not expect GASB 87 to have a significant impact on the financial statements.

In March 2018, GASB issued Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements (GASB 88). GASB 88 provides certain clarifications regarding debt as a liability and identifies additional required disclosures related to debt, including direct borrowings and direct placements of debt. The Plan adopted GASB 88 on July 1, 2019, for the June 30, 2020, reporting year, which did not have a significant impact on the financial statements.

In June 2018, GASB issued Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period (GASB 89). GASB 89 directs that interest costs incurred during the construction period of an asset be expensed in the period incurred. GASB 89 changes previous guidance regarding capitalized construction costs where such costs were typically included in the capitalized cost of the asset constructed and depreciated over time. The Plan adopted GASB 89 on July 1, 2020, for the June 30, 2021, reporting year. The Plan does not expect GASB 89 to significantly impact the financial statements.

In August 2018, GASB issued Statement No. 90, *Majority Equity Interests* (GASB 90), an amendment of GASB Statements No. 14 and No. 61. GASB 90 seeks to improve the consistency and comparability of financial reporting for majority equity interests, or situations where an entity would hold a majority share of equity or have a measurable right to resources of a legally separate entity. Under GASB 90 specific guidance is also provided for governments engaged in fiduciary activities when reporting equity interests. The Plan adopted GASB 90 on July 1, 2019, for the June 30, 2020, reporting year, which did not significantly impact the financial statements.

In May 2019, GASB issued Statement No. 91, *Conduit Debt Obligations* (GASB 91). The objective of GASB 91 is to provide a single method of reporting for conduit debt obligations issued and eliminate diversity in practice regarding (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. The Plan will adopt GASB 91 on July 1, 2021, for the June 30, 2022, reporting year. The Plan does not expect GASB 91 to have a significant impact the financial statements.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### **Recent Accounting Pronouncements, Continued**

In January 2020, GASB issued Statement No. 92, *Omnibus 2020* (GASB 92). GASB 92 is a cleanup omnibus that addresses multiple issues including; interim lease reporting, intra-entity asset transfers between the primary government and a component unit for defined benefit pension and OPEB plans, reporting of postemployment benefit plans that do not meet the definition of a trust, applicability of certain fiduciary activities to postemployment benefit arrangements, measurement of liabilities and assets related to ARO's (asset retirement obligations) in a government acquisition, reporting by public entity risk pools, references to nonrecurring fair value measurements of assets and liabilities and terminology used when referring to derivative instruments. The Plan adopted GASB 92 on July 1, 2020, for the June 30, 2021, reporting year. GASB 92 will not have a significant impact on the Plan's financial statements.

In March 2020, GASB issued Statement No. 93, Replacement of Interbank Offer Rates (GASB 93). GASB 93 addresses upcoming changes and the eventual removal of a global reference rate called LIBOR (London Interbank Offered Rate) which is often used as a reference rate for variable and derivative instruments. GASB 93 addresses allowable exceptions to existing contracts and agreements where LIBOR can be replaced with another IBOR without needed a new contract. GASB 93 also identifies the SOFR (Secured Overnight Financing Rate) and the FFR (Federal Funds Rate) as benchmarks for evaluating interest rate swaps. Finally, GASB 93 modifies lease agreements to allow for a change in the IBOR without being considered a modification to a lease. The Plan adopted GASB 93 on July 1, 2020, for the June 30, 2021, reporting year. The Plan does not expect GASB 93 to significantly impact the financial statements.

In March 2020, GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements* (GASB 94). GASB 94 defines and provides financial reporting requirements for Public-Private or Public-Public Partnerships (PPP) and Availability Payment Arrangements (APA). A PPP is an arrangement between a government (transferor) and an operator (governmental or non-governmental) to provide public services by conveying the right to control or use a nonfinancial or infrastructure asset for a period of time in an exchange-like transaction. An APA is a similar arrangement where the operator may also be compensated for services that include designing, constructing, financing and maintaining a nonfinancial asset for a period of time. The Plan will adopt GASB 94 on July 1, 2022, for the June 30, 2023, reporting year. GASB 94 will not have a significant impact on the Plan's financial statements.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### **Recent Accounting Pronouncements, Continued**

In May 2020, GASB issued Statement No. 95, Postponement of the Effective Dates of Certain Authoritative Guidance (GASB 95). GASB 95 provides temporary postponement of the effective dates of certain provisions in GASB Statements and Implementation Guides that first became effective or are scheduled to become effective after June 15, 2018. Most affected statements are postponed by one year while GASB Statement No. 87, Leases, and Implementation Guide No. 2019-3, Leases, are postponed by 18 months. GASB 95 was effective immediately for the June 30, 2020, reporting year. The Plan does not anticipate a significant impact on the financial statements due to GASB 95. The Plan does not anticipate deferring any affected GASB Statements since their impact on the Plan's financial reporting will not be significant.

In May 2020, GASB issued Statement No. 96, Subscription-Based Information Technology Arrangements (GASB 96). GASB 96 provides accounting and financial reporting guidance for the governmental end users of subscription-based information technology arrangements (SBITAs). GASB 96 defines an SBITA, establishes right-to-use assets and corresponding liabilities, and provides capitalization criteria and the note disclosures required for SBITAs. The Plan will adopt GASB 96 on July 1, 2022, for the June 30, 2023, reporting year. The Plan does not expect GASB 96 to significantly impact the financial statements.

In June 2020, GASB issued Statement No. 97, Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans (GASB 97). GASB 97 seeks to improve consistency and comparability related to fiduciary component unit reporting in circumstances where the potential component unit does not have a governing board and the primary government performs such duties. GASB 97 also seeks to mitigate reporting costs for certain defined-contribution, OPEB and other employee benefit plans as fiduciary component units and to enhance the relevance, consistency and comparability of Internal Revenue Code (IRC) Section 457 deferred compensation plans. Portions of GASB 97 where effective immediately for the June 30, 2020, reporting year. The Plan will adopt sections of GASB 97 related to IRC Section 457 plans on July 1, 2021, for the June 30, 2022, reporting year. GASB 97 will not significantly impact the Plan's financial statements.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### **Use of Estimates**

The preparation of the Plan's financial statements in conformity with accounting principles generally accepted in the United States requires management of the Plan to make significant estimates and assumptions that affect the reported amounts of net position restricted for pensions at the date of the financial statements and the actuarial information in Exhibits I, II, and III included in the required supplementary information as of the benefit information date, the changes in the Plan's net position during the reporting period, and when applicable, disclosures of contingent assets and liabilities at the date of the financial statements. Actual results could differ from those estimates.

#### **Risks and Uncertainties**

Contributions to the Plan and the actuarial information in Exhibits I, II, and III included in the required supplementary information 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.

#### **Plan Contributions**

Contributions to the Plan are recognized when due pursuant to formal commitments, as well as statutory or contractual requirements.

#### **Plan Benefit Payments and Refunds**

Benefits and refunds of the Plan are recognized when due and payable in accordance with the terms of the Plan.

#### **Receivables**

At June 30, 2020 and 2019, the Plan had no long-term receivables. All the receivables reflected in the statements of fiduciary net position are expected to be received and available for use by the Plan in its operations. Also, no allowance for any uncollectible portions is considered necessary.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### **Investments**

Management of the Plan is authorized to invest in eligible investments as approved by the Board as set forth in its investment policy. The Board reviews and updates the plan investment policy at least annually, making changes as deemed necessary to achieve policy goals. An investment policy change can be made anytime the need should arise at the discretion of the Board.

<u>Investment Allocation Policy</u>—The Board's asset allocation policy will currently maintain approximately 60% of assets in equity instruments, including public equity, long/short hedge, venture capital, and private equity strategies; approximately 25% of assets in fixed income to include investment grade bonds, high yield and non-dollar denominated bonds, convertible bonds, low volatility hedge funds, and absolute return strategies; and 15% of assets in core and opportunistic real estate.

<u>Significant Investment Policy Changes Made During the Year</u>—During the year ended June 30, 2020, no significant investment policy changes were made. During the year ended June 30, 2019, the Board made several target allocation changes to the investment policy. The Board increased the target allocation for private equity to 15% from 10%, increased the target allocation for core real estate to 10% from 5%, reduced the target allocation to long/short equity to 10% from 15%, and eliminated the target of 5% to commodities.

<u>Rate of Return</u>—For the years ended June 30, 2020 and 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 2.15% and 4.12%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### **Investments, Continued**

<u>Method Used to Value Investments</u>—As a key part of the Plan's activities, it holds investments that are measured and reported at fair value on a recurring basis. Generally accepted accounting principles establish a fair value hierarchy for the determination and measurement of fair value. This hierarchy is based on the type of valuation inputs needed to measure the fair value of an asset. The hierarchy generally is as follows:

Level 1—Unadjusted quoted prices in active markets for identical assets.

Level 2—Quoted prices for similar assets, or inputs that are observable or other forms of market corroborated inputs.

Level 3—Pricing based on best available information, including primarily unobservable inputs and assumptions market participants would use in pricing the asset.

Short-term investments include an investment fund composed of an investment in units of a commingled trust fund of the Plan's custodial agent (which is valued at amortized cost, which approximates fair value), commercial paper, treasury bills, and U.S. government agency securities. Active manager accounts holding debt and equity securities are reported at fair value, as determined by the Plan's custodial agent, using pricing services or prices quoted by independent brokers based on the latest reported sales prices in active markets, and 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 Plan in equity index and commingled trust funds is determined by the respective fund trustee or manager based on quoted sales prices of the underlying securities. The fair value of hedge fund and private equity investments are priced by each respective manager using a combination of observable and unobservable inputs. The fair value of the real estate is determined from independent appraisals and discounted income approaches. Investments which do not have an established market are reported at estimated fair value based on primarily unobservable inputs.

Net investment income (loss) includes net appreciation (depreciation) in the fair value of investments, interest income, dividend income, investment income from real estate, securities lending income and expenses, and investment expenses, which includes investment management and custodial fees and all other significant investment related costs. Foreign currency translation gains and losses are reflected in the net appreciation (depreciation) in the fair value of investments. Investment income from real estate includes the Plan's share of income from operations, net appreciation (depreciation) in the fair value of the underlying real estate properties, and the Plan's real estate investment management fees. The fair value of the limited partnerships is determined by managers of the partnerships based on the values of the underlying assets.

See Independent Auditors' Report.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### **Investments, Continued**

The Plan's international investment managers 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. The gains and losses on these contracts are included in income in the period in which the exchange rates change.

The Plan may invest in various traditional financial instruments that fall under the broad definition of derivatives. The Plan's derivatives may include collateralized mortgage obligations, convertible stocks and bonds, and variable rate instruments. These investments do not increase investment risk beyond allowable limits specified in the Plan's investment policy.

The Plan's investment policy provides for investments in 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 market 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 such changes could materially affect the amounts reported in the statements of fiduciary net position.

The investment policy limits the concentration of each portfolio manager. Except as noted below, no investment with a single firm exceeds 5% of the Plan's net position.

The Plan invests in domestic equity index funds, domestic equity commingled trust funds, and international equity funds. The Plan shares the risk of loss in these funds with other participants in proportion to its respective investment. Because the Plan does not own any specific identifiable investment securities of these funds, the market risk associated with any derivative investments held in these funds is not apparent. The degree of market risk depends on the underlying portfolios of the funds, which were selected by the Plan 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.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

## **Investments, Continued**

The following tables present individual investments held by a single organization that exceed 5%\* of the Plan's fiduciary net position at June 30:

			202	20
Classification of	Name of	Shares		Fair
<u>Investment</u>	<u>Organization</u>	<u>Held</u>	Cost	<u>Value</u>
			(Amounts in	Thousands)
Long/short hedge funds	K2 Mauna Kea	144,053,958	\$ 98,020	143,883
Domestic equities	Northern Trust	13,808,925	287,239	500,201
Domestic corporate bonds	Agincourt	N/A	238,915	258,342
International equities	Barings	148,738,494	117,000	148,738
International corporate bonds and private				
equity—non-real estate	Oaktree Capital Mgmt.	147,568,282	156,368	146,699
Real estate—core and private equity	JP Morgan	14,809,408	93,330	150,762
			201	.9
Classification of	Name of	Shares		Fair
<u>Investment</u>	<u>Organization</u>	<u>Held</u>	<u>Cost</u>	<u>Value</u>
			(Amounts in	Thousands)
Long/short hedge funds	Grosvenor	374,278,418	\$ 215,994	374,278
Domestic equities	Northern Trust	13,810,298	287,268	465,476
International equities	Mondrian	3,939,387	56,861	140,801
International corporate bonds and private				
equity—non-real estate	Oaktree Capital Mgmt.	143,855,591	138,359	144,043

<sup>\*</sup> While the investment with a single entity may exceed 5% of the Plan's net position, each investment is comprised of numerous individual securities. As such, no individual security exceeds the 5% threshold.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### Repurchase/Reverse Repurchase Agreement

The Plan has a master repurchase/reverse repurchase agreement. Under the agreement, the Plan may enter into a purchase/sale of a security with a simultaneous agreement to resell/repurchase the security at a specified future date and price. The Plan did not enter into any transactions under this agreement during fiscal year 2020 or 2019.

#### **Capital Assets**

Capital assets, which consist of software, are stated at cost less accumulated depreciation. Capital assets were fully depreciated as of June 30, 2020 and 2019.

#### **Income Taxes**

The Plan is exempt from federal and state income taxes.

## **Plan Termination**

In the event the Plan terminates, the Oklahoma Statutes contain no provision for the order of distribution of the net position of the Plan. Plan termination would take an act of the Oklahoma Legislature, at which time the order of distribution of the Plan's net position would be addressed.

## **Administrative Items**

#### **Operating Leases**

The Plan had an operating lease which ended June 30, 2020. The lease has been renewed for the period July 1, 2020, through June 30, 2021. Total lease expense was approximately \$91,000 for each of the years ended June 30, 2020 and 2019.

#### **Compensated Absences**

Employees of the System earn annual vacation leave at the rate of 10 hours per month for up to 5 years of service, 12 hours per month for service of 5 to 10 years, 13.3 hours per month for service of 10 to 20 years, and 16.7 hours per month for over 20 years of service. Unused annual leave may be accumulated to a maximum of 480 hours. All accrued leave is payable upon termination, resignation, retirement, or death. As of June 30, 2020 and 2019, approximately \$126,000 and \$152,000, respectively, was included in accounts payable as the accrual for compensated absences.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

# Administrative Items, Continued

#### Compensated Absences, Continued

The changes in the accrual for compensated absences for the years ended June 30 were as follows:

	2020	2019
Balance at beginning of year	\$ 151,696	129,100
Additions and transfers	76,124	93,169
Amount used	 (102,113)	(70,573)
Balance at end of year	\$ 125,707	151,696

#### Retirement Expense

Employees of the System are eligible to participate in the Oklahoma Public Employees Retirement Plan, which is administered by the Oklahoma Public Employees Retirement System (OPERS). OPERS is a multiple-employer, cost-sharing public retirement defined benefit pension plan and a defined contribution plan. OPERS provides retirement, disability, and death benefits to its plan members and beneficiaries. OPERS issues a publicly available financial report which includes financial statements and required supplementary information for OPERS. That report may be obtained by writing to the Oklahoma Public Employees Retirement System, 5400 N. Grand Blvd, Suite 400, Oklahoma City, OK 73112-5625.

#### Defined Benefit Plan

Eligible employees of the System are required to contribute 3.5% of their annual covered salary to the defined benefit plan. The System is required to contribute at an actuarially determined rate, which was 16.5% of annual covered payroll as of June 30, 2020, 2019, and 2018. During 2020, 2019, and 2018, totals of \$166,036, \$152,014, and \$142,975, respectively, were paid to OPERS. The System has contributed 100% of required contributions to OPERS for 2020, 2019, and 2018. The System's and the employees' portions of those amounts were as follows:

	2020	2019	2018
System's portion Employees' portion	\$ 133,610 32,426	122,610 29,404	117,954 25,021
	\$ 166,036	152,014	142,975

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

## **Administrative Items, Continued**

## Defined Benefit Plan, Continued

The Plan adopted GASB 68 as of July 1, 2014, as it applies to its participation in OPERS. The effects on the financial statements of the Plan as a result of the adoption of GASB 68 are considered immaterial.

The Plan adopted GASB 75 as of July 1, 2017, as it applies to its participation in OPERS, OPEB, and Implicit Rate Subsidy. The effects on the financial statements of the Plan as a result of the adoption of GASB 75 are considered immaterial.

### **Defined Contribution Plan**

Effective November 1, 2015, OPERS established the Pathfinder Defined Contribution Plan ("Pathfinder"), a mandatory defined contribution plan for eligible state employees who first become employed by a participating employer on or after November 1, 2015, and have no prior participation in OPERS. Under Pathfinder, members will choose a contribution rate which will be matched by their employer up to 7%. All state employers with Pathfinder participants contribute 16.5% of salary, with contributions in excess of the matched amount going into the Defined Benefit Plan, as required by statute. During 2020, 2019, and 2018, totals of \$17,386, \$16,591, and \$17,991, respectively, were paid to OPERS, representing 100% of the required contributions. The System's and employees' contributions to Pathfinder were as follows:

	2020	2019	2018
System's portion Employees' portion	\$ 12,062 5,324	11,649 4,942	12,632 5,359
	\$ 17,386	16,591	17,991

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (2) <u>SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED</u>

#### Administrative Items, Continued

#### Risk Management

The Risk Management Division (the "Division") of the Office of Management and Enterprise Services is empowered by the authority of Title 74 O.S. Supp. 1993, Section 85.34 et seq. The Division is responsible for the acquisition and administration of all insurance purchased by the State of Oklahoma or administration of any self-insurance plans and programs adopted for use by the State of Oklahoma for certain organizations and bodies outside of state government, at the sole expense of such organizations and bodies.

The Division is authorized to settle claims of the State of Oklahoma and shall govern the dispensation and/or settlement of claims against a political subdivision. In no event shall self-insurance coverage provided by the State of Oklahoma, an agency, or other covered entity exceed the limitations on the maximum dollar amount of liability specified by the Oklahoma Government Tort Claims Act, as provided by Title 51 O.S. Supp. 1988, Section 154. The Division oversees the collection of liability claims owed to the State of Oklahoma incurred as the result of a loss through the wrongful or negligent act of a private person or other entity.

The Division is also charged with the responsibility to immediately notify the attorney general of any claims against the State of Oklahoma presented to the Division. The Division purchases insurance policies through third-party insurance carriers that ultimately inherit the risk of loss. The Division annually assesses each State agency, including the System, their pro rata share of the premiums purchased. The System has no obligations to any claims submitted against the System.

#### **Date of Review of Subsequent Events**

The Plan has evaluated subsequent events through September 10, 2020, the date that the financial statements were available to be issued, and determined that no subsequent events have occurred which require adjustment to or disclosure in the financial statements.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (3) <u>DESCRIPTION OF THE PLAN</u>

The following brief description of the Plan is provided for general information purposes only. Participants should refer to the Oklahoma Statutes for more complete information.

#### **General**

The Plan is a multiple-employer, cost-sharing defined benefit pension plan covering members who have actively participated in being a police officer for an Oklahoma municipality or state agency which is a member of the Plan.

#### **Contributions**

The contribution requirements of the Plan are at an established rate determined by Oklahoma statute and are not based on actuarial calculations.

An eligible municipality may join the Plan on the first day of any month. Upon approval by the Board, its membership is irrevocable. All persons employed as police officers are required to participate in the Plan upon initial employment with the police department of the participating municipality. The Oklahoma Legislature has authority to establish and amend contribution amounts. Until July 1, 1991, each municipality contributed to the System 10% of the actual base salary of each participant employed by the municipality. Beginning July 1, 1991, municipality contributions increased by 1/2% per year and continued this increase until July 1, 1996, when the contribution level reached 13%, which it remains at currently. Each participant of the Plan contributes 8% of their actual paid base salary. Additional funds are provided to the Plan by the State of Oklahoma, a non-employer contributing entity, through a 14% allocation of the tax on premiums collected by insurance companies operating in Oklahoma and by the net investment income generated on assets held by the Plan. The Plan is responsible for paying administrative costs. Administrative costs of the Plan are paid by using the earnings from the invested assets of the Plan.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

### (3) <u>DESCRIPTION OF THE PLAN, CONTINUED</u>

#### **Benefits**

In general, the Plan provides defined retirement benefits based on members' final average compensation, age, and term of service. In addition, the retirement program provides for benefits upon disability and to survivors upon death of eligible members. The Plan's benefits are established and amended by State statute. Retirement provisions are as follows:

- The normal retirement date under the Plan is the date upon which the participant completes 20 years of credited service, regardless of age. Participants become vested upon completing 10 years of credited service as a contributing participant of the Plan. No vesting occurs prior to completing 10 years of credited service. Participants' contributions are refundable, without interest, upon termination prior to normal retirement. Participants who have completed 10 years of credited service may elect a vested benefit in lieu of having their accumulated contributions refunded. If the vested benefit is elected, the participant is entitled to a monthly retirement benefit commencing on the date the participant reaches 50 years of age or the date the participant would have had 20 years of credited service had employment continued uninterrupted, whichever is later.
- Monthly retirement benefits are calculated at 2.5% of the final average salary (defined as the average paid base salary of the officer over the highest 30 consecutive months of the last 60 months of credited service) multiplied by the years of credited service, with a maximum of 30 years of credited service considered.
- Monthly benefits for participants due to permanent disability incurred in the line of duty are 2.5% of the participants' final average salary multiplied by 20 years. This disability benefit is reduced by stated percentages for partial disability based on the percentage of impairment. After 10 years of credited service, participants who retire due to disability incurred from any cause are eligible for a monthly benefit based on 2.5% of their final average salary multiplied by the years of service. This disability benefit is also reduced by stated percentages for partial disability based on the percentage of impairment. Effective July 1, 1998, once a disability benefit is granted to a participant, that participant is no longer allowed to apply for an increase in the dollar amount of the benefit at a subsequent date.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (3) <u>DESCRIPTION OF THE PLAN, CONTINUED</u>

# **Benefits, Continued**

- Survivor's benefits are payable in full to the participant's beneficiary upon the death of a retired participant. The beneficiary of any active participant killed in the line of duty is entitled to a pension benefit. Effective July 1, 1999, a \$5,000 death benefit is also paid, in addition to any survivor's pension benefits under the Plan, to the participant's beneficiary or estate for active or retired members.
- The Deferred Option allows participants otherwise eligible for a normal retirement benefit to defer terminating employment and drawing retirement benefits for a period not to exceed 5 years. Under the Deferred Option, retirement benefits are calculated based on compensation and service at the time of election and a separate account is established for each participant. During the participation period, the employee's retirement benefit is credited to the participant's account along with a portion of the employer's contribution and interest. Interest is credited at a rate of 2% below the rate of return on the investment portfolio of the Plan, with a guaranteed minimum interest equal to the assumed actuarial interest of 7.5%. Employee contributions cease once participation in the Deferred Option is elected. At the conclusion of participation in the Deferred Option, the participant will receive the balance in the separate account under payment terms allowed by the Deferred Option and will then begin receiving retirement benefit payments as calculated at the time of election.
- In the 2003 Legislative Session, Senate Bill 688 and House Bill 1464 created a "Back" DROP for members of the System. The "Back" DROP is a modified deferred retirement option plan. The "Back" DROP allows the member flexibility by not having to commit to terminate employment within 5 years. Once a member has met their normal retirement period of 20 years, the member can choose, upon retirement, to be treated as if the member had entered into the "Back" DROP. A member, however, cannot receive credit to the "Back" DROP account based upon any years prior to when the member reached their normal retirement date. Once a member is ready to retire, the member can make the election to participate in the "Back" DROP and can receive a "Back" DROP benefit based upon up to 5 years of participation. The member's regular retirement benefit will not take into account any years of service credited to the "Back" DROP.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

### (3) <u>DESCRIPTION OF THE PLAN, CONTINUED</u>

#### **Benefits, Continued**

- In 2006, the Board approved a method of payment called the Deferred Option Payout Provision (the "Payout Provision"). The Payout Provision allows a retired member who has completed participation in the Deferred Option or the "Back" DROP the ability to leave their account balance in the Plan. The retired member's account balance will be commingled and reinvested with the total assets, and therefore the member will not be able to direct their personal investments. Written election must be made to the Board no more than 30 days following the termination of employment.
- Upon participating in the Payout Provision, a retired member shall not be guaranteed a minimum rate of return on their investment. A retired member shall earn interest on their account as follows:
  - a) The retired member shall earn two percentage points below the net annual rate of return of the investment portfolio of the System.
  - b) If the portfolio earns less than a 2% rate of return, but more than zero, the retired member shall earn zero percentage points.
  - c) If the portfolio earns less than zero percentage points, there shall be a deduction from the retired member's balance equal to the net annual rate of return of the investment portfolio of the System.

Interest as earned above shall be credited to the retired member's account.

The Oklahoma Legislature has the authority to grant percentage increases or special one-time payments to persons receiving benefits from the Plan. Additionally, certain retirees are entitled to receive a cost-of-living adjustment (COLA) when a COLA is granted to active police officers in the retiree's city. Participants eligible to receive both types of benefit increases are to receive the greater of the legislative increase or the benefit increase the participant would receive pursuant to the COLA provision.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS</u>

## **Cash and Cash Equivalents**

At June 30, cash and cash equivalents were composed of the following:

		2020	2019
		(Amounts in Th	nousands)
Short-term investments:			
OK INVEST	\$	5,023	5,743
Domestic	<u> </u>	32,571	12,283
Total short-term investments		37,594	18,026
Total cash and cash equivalents	\$	37,594	18,026

At June 30, 2020 and 2019, as a result of outstanding checks and deposits, the carrying amount of the Plan's OK INVEST account totaled \$5,022,669 and \$5,743,433, respectively, and the bank balance totaled \$13,005,407 and \$12,364,105, respectively.

Included in cash and cash equivalents are investments included in the State of Oklahoma's OK INVEST Portfolio. Because these investments are controlled by the State of Oklahoma and the balances change on a daily basis, they are considered cash equivalents. The balances are overnight funds consisting of U.S. agencies, mortgage-backed agencies, U.S. Treasury notes, municipal bonds, foreign bonds, tri-party repurchase agreements, certificates of deposit, commercial paper, and money market mutual funds. As of June 30, the investment balances were as follows:

	2020	2019
U.S. agencies	\$ 3,014,720	3,830,847
Mortgage-backed agencies	4,832,370	4,968,043
U.S. Treasury notes	4,136,089	1,988,146
Municipal bonds	16,674	21,971
Certificates of deposit	191,940	273,371
Commercial paper	135,149	51,216
Money market mutual funds	 678,465	1,230,511
	\$ 13,005,407	12,364,105

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (4) CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED

#### Cash and Cash Equivalents, Continued

The Plan's other short-term investments consist of temporary investments in commingled trust funds of the Plan's custodial agent, commercial paper, treasury bills, and U.S. government agency securities. The commingled trust funds are composed of high-grade money market instruments with short maturities. Each participant shares the risk of loss in proportion to their respective investment in the funds.

#### **Custodial Credit Risk**

Custodial credit risk is the risk that in the event of the failure of a counterparty, the Plan will not be able to recover the value of its investments. Deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. Investment securities are exposed to custodial credit risk if they are uninsured, are not registered in the name of the Plan, and are held by a counterparty or the counterparty's trust department but not in the name of the Plan. While the investment policy does not specifically address custodial credit risk of deposits, it does limit the amount of cash and short-term investments to no more than 5% of each manager's portfolio. At June 30, 2020 and 2019, approximately \$32,571,000 and \$12,283,000, respectively, of cash and cash equivalents was uninsured and uncollateralized. The policy also provides that investment collateral be held by a third-party custodian with whom the Plan has a current custodial agreement in the Plan's name.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## 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 investment policy limits foreign equity investments to 15% of total assets through its asset allocation policy. Investments in equities and fixed-income securities as of June 30 are shown by monetary unit to indicate possible foreign currency risk.

	2020					
	Corporate Bonds					
Currency	J	<u>Equities</u>	and Bond Funds	<u>Total</u>		
		(Am	nounts in Thousands)			
Commingled funds:						
Barings Focused International Equity Fund	\$	148,738	-	148,738		
Mondrian International Equity Fund		122,217	-	122,217		
AllianceBernstein EM Strategic Core Fund		86,540	-	86,540		
Wasatch Emerging Markets Small						
Capitalization Fund		42,192	-	42,192		
Loomis Sayles World Bond Fund		_	85,485	85,485		
Oaktree Global Credit Fund		_	133,915	133,915		
	\$	399,687	219,400	619,087		
			2019			
			Corporate Bonds			
Currency	J	Equities	and Bond Funds	<u>Total</u>		
	_	_	nounts in Thousands)			
Commingled funds:		,	,			
Barings Focused International Equity Fund	\$	120,844	-	120,844		
Mondrian International Equity Fund		140,801	-	140,801		
AllianceBernstein EM Strategic Core Fund		80,267	-	80,267		
Wasatch Emerging Markets Small						
wasatch Emerging Warkets Sman						
2 2		36,169	-	36,169		
Capitalization Fund Loomis Sayles World Bond Fund		36,169	- 81,553	36,169 81,553		
Capitalization Fund		36,169	81,553 129,150			
Capitalization Fund Loomis Sayles World Bond Fund		- -	,	81,553		
Capitalization Fund Loomis Sayles World Bond Fund	\$	36,169 - - - 378,081	,	81,553		

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## Foreign Currency Risk, Continued

The Plan was exposed to foreign currency risk through investments in the following commingled funds:

- Barings Focused International Equity Fund—The fund seeks long-term capital growth by investing in a concentrated portfolio of equity securities from developed international markets combined with a limited number of equities from emerging markets.
- Mondrian International Equity Fund—The fund's investment objective is long-term total return through a value-driven approach of equity selection. The fund pursues this strategy by investing primarily in non-U.S. and emerging market equity securities.
- AllianceBernstein Emerging Markets Strategic Core Fund—The fund seeks long-term capital growth through a bottom-up fundamental selection of equities in global emerging markets. The fund will generally hold between 70-85 equity positions which may include up to 20% in developed-market domiciled companies that have significant emerging market exposure. The fund may also hold up to 10% in Frontier Market companies.
- Wasatch Emerging Markets Small Capitalization Fund—The fund seeks long-term capital growth by investing primarily in equity securities of small companies located in emerging markets. Companies will generally have a market capitalization of less than \$3 billion when purchased, and holdings will generally span broadly across countries and sectors.
- Loomis Sayles World Bond Fund—The fund normally invests at least 80% of its assets
  in fixed-income securities. The fund focuses primarily on investment grade fixedincome securities worldwide, although it may invest up to 20% of its fair value in lower
  rated fixed-income securities. Securities held by the fund may be denominated in any
  currency, may be from issuers located in emerging markets, or may be fixed-income
  securities of any maturity.
- Oaktree Global Credit Fund—The fund invests across a broad spectrum of debt instruments including high-yield corporate bonds, senior loans, emerging market debt, real estate debt, structured credit and convertible securities with a primary emphasis on issuers in North America and Europe.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

#### **Credit Risk**

Fixed-income securities are subject to credit risk. Credit quality rating is one method of assessing the ability of the issuer to meet its obligation. The investment portfolio for domestic fixed-income securities requires the portfolio to maintain an average of A+ or higher. For international fixed-income securities, the investment policy requires the portfolio to invest in securities equal to or better than Moody's Baa3 or Standard & Poor's BBB. Exposure to credit risk as of June 30 was as follows:

	2020					
				Fair Value as a		
				Percent of Total		
	Moody's Ratings			Fixed Maturity		
<u>Investment Type</u>	(Unless Noted)	Fa	air Value	Fair Value		
	(Amo	unts	in Thousa	inds)		
U.S. government agency securities	Aaa	\$	10,624	28.02%		
U.S. Treasury securities	UST (1)		27,293	71.98%		
Total U.S. government securities		\$	37,917	<u>100.00</u> %		
Domestic corporate bonds	Aaa	\$	79,538	36.59%		
	A- (S&P)		1,302	0.60%		
	Aa1		900	0.41%		
	Aa2		6,750	3.11%		
	Aa3		651	0.30%		
	A1		7,568	3.48%		
	A2		17,149	7.89%		
	A3		24,673	11.35%		
	Baa1		36,432	16.77%		
	Baa2		31,347	14.42%		
	Baa3		10,047	4.62%		
	Ba1		359	0.17%		
	Not Rated		640	0.29%		
<b>Total domestic corporate bonds</b>		\$	217,356	<u>100.00</u> %		
International corporate bonds and						
bond funds (avg. rating)	A3	\$	85,485	38.96%		
	B1		133,915	<u>61.04</u> %		
Total international corporate bonds and bond funds		<u>\$</u>	219,400	<u>100.00</u> %		
(1) II S. Transury contrities				<del></del>		

<sup>(1)</sup> U.S. Treasury securities.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED

# Credit Risk, Continued

	2019					
				Fair Value as a		
				Percent of Total		
	Moody's Ratings			Fixed Maturity		
Investment Type	(Unless Noted)	Fa	ir Value	Fair Value		
	(Amou	nts	in Thouse	ands)		
U.S. government agency securities	Aaa	\$	12,924	31.23%		
U.S. Treasury securities	UST (1)		28,459	68.77%		
Total U.S. government securities		\$	41,383	<u>100.00</u> %		
Domestic corporate bonds	Aaa	\$	66,568	37.62%		
•	Aa1		338	0.19%		
	Aa2		3,372	1.91%		
	Aa3		1,541	0.87%		
	A1		2,629	1.49%		
	A2		14,744	8.34%		
	A3		25,726	14.55%		
	BBB+(S&P)		1,334	0.75%		
	Baa1		28,497	16.11%		
	Baa2		20,403	11.54%		
	Baa3		9,002	5.09%		
	Ba1		1,963	1.11%		
	Not Rated		753	<u>0.43</u> %		
<b>Total domestic corporate bonds</b>		\$	<u>176,870</u>	<u>100.00</u> %		
International corporate bonds and						
bond funds (avg. rating)	A2	\$	81,553	38.71%		
<del>-</del> -	B1		129,150	61.29%		
Total international corporate bonds and bond funds		\$	210,703	<u>100.00</u> %		

<sup>(1)</sup> U.S. Treasury securities.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## **Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. While all investments are subject to market changes, securities invested in index funds are more sensitive to market risk. Although the investment policy does not specifically address the duration of fixed-income securities, the Plan does monitor interest rate risk by monitoring the performance of each investment manager. As of June 30, the Plan had the following investments with maturities:

	2020					
	Inves	tment Matur	rities at Fair	Value (in Ye	ears)	
		5 or				
		More,		Investments		
	Less	Less	10 or	with No	Total Fair	
<u>Investment Type</u>	<u>Than 5</u>	<u>Than 10</u>	More	<u>Duration</u>	<u>Value</u>	
		(Amou	nts in Thous	sands)		
<b>U.S. government securities:</b>						
U.S. government agency	\$ -	-	10,624	-	10,624	
U.S. Treasury	<u> </u>	<u> </u>	27,122		27,293	
Total U.S. government securities		171	37,746		37,917	
Domestic corporate bonds:						
Commercial mortgage-backed						
securities	-	-	6,438	-	6,438	
Corporates and other credit	55,759	50,227	37,284	-	143,270	
U.S. government mortgages	1	1,665	65,982		67,648	
<b>Total domestic corporate bonds</b>	55,760	51,892	109,704		217,356	
International corporate bonds and						
bond funds (effective duration)	133,915	85,485			219,400	
	\$ 189,675	137,548	147,450		474,673	

As noted above, the Plan had approximately \$67,648,000 of investments in U.S. government mortgages, of which \$40,622,000 represents FNMA loans and \$27,026,000 represents FHLMC mortgages. U.S. government agency securities of \$10,624,000 represent GNMA mortgages.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED

# **Interest Rate Risk, Continued**

	2019					
	Inves	tment Matu	ırities at Fai	r Value (in Y	<u>'ears)</u>	
		5 or				
		More,		Investments		
	Less	Less	10 or	with No	Total Fair	
<u>Investment Type</u>	<u>Than 5</u>	<u>Than 10</u>	More	<b>Duration</b>	<u>Value</u>	
		(Amor	unts in Thou	ısands)		
U.S. government securities:						
U.S. government agency	\$ -	-	12,924	-	12,924	
U.S. Treasury	1,901	6,328	20,230		28,459	
Total U.S. government securities	1,901	6,328	33,154		41,383	
Domestic corporate bonds:						
Commercial mortgage-backed						
securities	-	-	5,337	-	5,337	
Corporates and other credit	60,993	27,141	26,318	-	114,452	
U.S. government mortgages	68	1,261	55,752		57,081	
<b>Total domestic corporate bonds</b>	61,061	28,402	87,407		176,870	
International corporate bonds and						
bond funds (effective duration)	129,150	81,553			210,703	
	\$ 192.112	116,283	120,561	_	428,956	
	<del>+ 172,112</del>	110,200	120,001		.=3,700	

As noted above, the Plan had approximately \$57,081,000 of investments in U.S. government mortgages, of which \$36,689,000 represents FNMA loans and \$20,392,000 represents FHLMC mortgages. U.S. government agency securities of \$12,924,000 represent GNMA mortgages.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## **Investments Measured at Fair Value**

			Fair Value Measurements at		
				porting Date U	Jsing
			Quoted Prices		
			in Active	Significant	
			Markets for	Other	Significant
	A	mounts	Identical	Observable	Unobservable
		asured at	Assets	Inputs	Inputs
June 30, 2020		ir Value	(Level 1)	(Level 2)	(Level 3)
Investments by Fair Value Level		_	(Amounts in	Thousands)	<del></del>
Cash and cash equivalents:					
OK INVEST—State managed short-term high liquidity	\$	5,023	-	5,023	_
BNY Mellon—STIF-type investment; high liquidity		32,571	-	32,571	-
Total cash equivalents measured at fair value	\$	37,594	-	37,594	
Debt securities:					
U.S. government agency	\$	10,624	-	10,624	-
U.S. Treasury		27,293	27,293	-	-
Domestic corporate bonds:					
Commercial mortgage-backed securities		6,438	-	6,438	-
Corporate bonds		143,270	-	143,270	-
U.S. government mortgages		67,648	-	67,648	-
International corporate bonds:					
Oaktree Global Credit Fund		133,915	-	-	133,915
Loomis Sayles World Bond Fund		85,485		85,485	
Total debt securities		474,673	27,293	313,465	133,915
<b>Equity securities—domestic:</b>					
Domestic Large Cap—					
Northern Trust Russell 1000 Index Fd		500,201	-	500,201	-
Domestic Small Cap Value Focus—Boston Partners		71,705	71,705	-	-
Domestic Small Cap Growth Focus—Silvercrest		87,466	87,466		
Total domestic equities		659,372	159,171	500,201	

(Continued)

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## **Investments Measured at Fair Value, Continued**

		Fair Value Measurements at Reporting Date Using		
June 30, 2020	Amounts Measured at Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Investments by Fair Value Level, Continued		(Amounts in	Thousands)	
Equity securities—international: Intl. Equities—Barings Focused Intl Equity Fund (days larged more)	140 720		140 720	
(developed markets)	148,738	-	148,738	-
Intl. Equities—Value Focus—Mondrian Partners Intl. Emerging Markets—Wasatch EM Small Cap Fund	122,217 42,193	-	122,217 42,193	-
Intl. Emerging Markets—Wasatch EM Shah Cap Fund Intl. Emerging Markets—AB EM Strategic Core	86,539	-	86,539	-
Total international equities	399,687		399,687	
Private equity:	399,007		399,007	<u>-</u>
Private equity—non-real estate focused	295,859	_	_	295,859
Real estate	56,294	_	_	56,294
Total private equity	352,153			352,153
Real estate—direct ownership—income producing:	302,103			
Total direct ownership real estate	4,100	_	_	4,100
Investments measured at net asset value (NAV):				
Low Volatility Hedge Fund—PAAMCO Long/Short Equity Hedge Fund—	86,528			
Grosvenor Class A & B Long/Short Equity Hedge Fund—	86,060			
K2 Mauna Kea Low Volatility Hedge Fund—Wellington Global	143,883			
Total Return Fund	78,151			
Core Real Estate—JP Morgan Strategic Property Fund	150,762			
Core Real Estate—Blackstone Property Partners	113,444			
Commodities—Mt. Lucas—MLM Macro-Peak	22,799			
Total investments measured at NAV	681,627			
Total investments measured at fair value	\$ 2,571,612			

# NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED

## **Investments Measured at Fair Value, Continued**

		Fair Value Measurements at			
	-		Reporting Date U		Jsing
			Quoted		
			Prices	gc. ,	
			in Active	Significant Other	g: :e .
		4	Markets for Identical	Otner	Significant Unobservable
		mounts asured at			
Luna 20, 2010		ir Value	Assets	Inputs (Level 2)	Inputs
June 30, 2019	<u> </u>	iii vaiue	(Level 1)		(Level 3)
Investments by Fair Value Level			(Amounts in	(Amounts in Thousands)	
Cash and cash equivalents:					
OK INVEST—State managed short-term high liquidity	\$	5,743	-	5,743	-
BNY Mellon—STIF-type investment; high liquidity		12,283		12,283	
Total cash equivalents measured at fair value	\$	18,026		18,026	
Debt securities:					
U.S. government agency	\$	12,924	-	12,924	-
U.S. Treasury		28,459	28,459	-	-
Domestic corporate bonds:		-			
Commercial mortgage-backed securities		5,337	-	5,337	-
Corporate bonds		114,452	-	114,452	-
U.S. government mortgages		57,081	-	57,081	-
International corporate bonds:					
Oaktree Global Credit Fund		129,150	-	-	129,150
Loomis Sayles World Bond Fund		81,553	<u>-</u> _	81,553	<u>-</u>
Total debt securities		428,956	28,459	271,347	129,150
<b>Equity securities—domestic:</b>					
Domestic Large Cap—					
Northern Trust Russell 1000 Index Fd		465,476	-	465,476	-
Domestic Small Cap Value Focus—Boston Partners		86,157	86,157	-	-
Domestic Small Cap Growth Focus—Cortina		92,428	92,428		<u>-</u>
Total domestic equities		644,061	178,585	465,476	
		<u></u>			

(Continued)

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

# **Investments Measured at Fair Value, Continued**

		Fair Value Measurements at Reporting Date Using		
June 30, 2019 Investments by Fair Value Level, Continued	Amounts Measured at <u>Fair Value</u>	Quoted Prices in Active Markets for Identical Assets (Level 1) (Amounts in	Significant Other Observable Inputs (Level 2) Thousands)	Significant Unobservable Inputs (Level 3)
Equity securities—international: Intl. Equities—Barings Focused Intl Equity Fund				
(developed markets)	120,844	-	120,844	-
Intl. Equities—Value Focus—Mondrian Partners	140,801	-	140,801	-
Intl. Emerging Markets—Wasatch EM Small Cap Fund	36,169	-	36,169	-
Intl. Emerging Markets—AB EM Strategic Core	80,267		80,267	
Total international equities	378,081		378,081	<u> </u>
Private equity:				
Private equity—non-real estate focused	279,066	-	-	279,066
Real estate	53,271	<u> </u>		53,271
Total private equity	332,337	-		332,337
Real estate—direct ownership—income producing:				
Total direct ownership real estate	4,300	-	-	4,300
Investments measured at net asset value (NAV):				
Low Volatility Hedge Fund—PAAMCO Long/Short Equity Hedge Fund—	114,730			
Grosvenor Class A & B Low Volatility Hedge Fund—Wellington Global	374,278			
Total Return Fund	66,411			
Core Real Estate—JP Morgan Strategic Property Fund	129,423			
Core Real Estate—Blackstone Property Partners	43,974			
Commodities—Gresham Partners—TAP Fund	48,626			
Commodities—Mt. Lucas—MLM Macro-Peak	26,755			
Total investments measured at NAV	804,197			
Total investments measured at fair value	\$ 2,591,932			

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

#### **Investments Measured at Fair Value, Continued**

Fair Value of Cash and Cash Equivalents—Short-term investments include cash equivalents held at the State Treasurer's office and an investment fund composed of units of a commingled trust fund of the Plan's custodial agent, commercial paper, treasury bills, and U.S. government agency securities. These investments offer high, immediate liquidity and are readily converted to cash. The funds are comprised primarily of very short-term debt instruments, and are valued at amortized cost, which also approximates fair value. For determining fair value, the instruments held are valued using actual quoted prices or by using matrix pricing, a method of pricing securities based on their relationship to benchmark quoted market prices. Both of these investments are classified in Level 2 of the fair value hierarchy based on the development of an aggregate daily value of the individual instruments in each fund that are typically classified in either Level 1 or Level 2 of the fair value hierarchy.

<u>Fair Value of Debt Securities</u>—The Plan holds a diversified mix of debt instruments through an active domestic bond manager, Agincourt, and has international debt exposure through the Loomis Sayles Global Bond Fund. Agincourt generally holds a mix of U.S. government agency securities and U.S. government mortgages, U.S. Treasury securities, domestic corporate bonds and commercial mortgage-backed securities. U.S. Treasury securities are classified in Level 1 of the fair value hierarchy, using quoted prices in active markets. The remaining debt securities are classified in Level 2 of the fair value hierarchy, valued using a matrix pricing technique. This method values securities based on their relationship to benchmark quoted prices. The Loomis Sayles Global Bond Fund is a global debt instrument commingled fund, and is classified in Level 2 of the fair value hierarchy based the development of a total value through the aggregation of Level 1 and Level 2 quoted prices for instruments held by the fund.

The Plan also holds a limited partnership, the Oaktree Global Credit Fund, managed by Oaktree Capital Management that focuses primarily on domestic and international fixed income and debt type securities, senior loans, convertible securities, secured loans, structured credit and emerging market debt.

The investments in this mandate are held in a limited partnership account where the underlying investments are priced in either Level 1, Level 2, or Level 3 of the fair value hierarchy, using quoted prices in active markets or other market corroborated inputs as well as independent valuation sources for certain debt instruments. The Oaktree account is classified in Level 3 of the fair value hierarchy based on the aggregation of the investments held. Oaktree prices the fund-monthly and offers monthly liquidity after 30 days' notice.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## **Investments Measured at Fair Value, Continued**

*Fair Value of Equity Securities*—The Plan holds equity securities through a number of managers, both actively and passively managed. They are as follows:

#### **DOMESTIC**

Northern Trust Collective Russell 1000 Index Fund—The Plan holds a proportionate share of a fund managed by Northern Trust that seeks to correlate the holdings of the Russell 1000 index fund, a basket of passively managed holdings to serve as a benchmark for the U.S. equity market. The equities that comprise this index are all domestic, publicly traded securities and are daily priced. The Northern Trust Collective Russell 1000 Index Fund is a commingled fund and is classified in Level 2 of the fair value hierarchy, as its total value is calculated daily through the aggregation of Level 1 quoted prices, providing the equivalent of the Russell 1000 index, a daily priced basket of assets. The Plan has daily liquidity access to its investment in this fund.

<u>Boston Partners (Small Cap Value Focus)</u>—The Plan has an active investment manager that focuses on domestic small to mid-capitalization sized companies with a mandate to follow the value style of investing. Boston Partners manages an account through the Plan's custodian, and purchases securities in the primary active domestic equity markets. The Boston Partners account is classified in Level 1 of the fair value hierarchy since all securities are priced at quoted market prices in active markets for identical assets.

<u>Cortina (Small Cap Growth Focus)</u>—The Plan has an active investment manager focused on the small to micro segment of the equities market with a mandate to pursue the growth style of investing. Cortina actively manages an account through the Plan's custodian and deals in equity securities in the domestic market. The Cortina account is classified in Level 1 of the fair value hierarchy since all securities are priced at quoted market prices in active markets for identical securities.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

# **Investments Measured at Fair Value, Continued**

Fair Value of Equity Securities—Continued

#### **INTERNATIONAL**

<u>AllianceBernstein (AB) Emerging Markets Strategic Core Equity</u>—The Plan initiated an investment with AllianceBernstein in November 2016 from the liquidation of its holdings in the Northern Trust Emerging Markets Index fund. The AB fund is a commingled fund that focuses on companies located in emerging markets or that have significant exposure to emerging markets. This fund is classified in Level 2 of the fair value hierarchy since the price of the fund is derived from securities that are all priced as quoted market prices in active markets. The fund prices on a daily basis and provides liquidity on a monthly (30-day notice) basis.

<u>Barings Focused International Equity</u>—The Plan participates in a commingled equity fund that focuses on a smaller number of equity securities located primarily in international developed markets. This investment is a commingled fund of international equity securities that are typically priced based on quoted market prices in active markets around the globe. This fund is classified in Level 2 of the fair value hierarchy, as the price of the fund is derived from securities that are all priced at quoted market prices in active markets. This fund prices and provides liquidity to its investors on a monthly basis.

<u>Mondrian Partners International Equity Fund L.P.</u>—The Plan participates in a fund managed by Mondrian Partners that invests primarily in non-US equity securities, with a focus on the value style of investing. This fund is classified in Level 2 in the fair value hierarchy since the price of the fund is derived from securities that are all priced at quoted market prices in active markets. The fund prices and provides liquidity to its investors on a monthly basis.

<u>Wasatch Emerging Markets Small Capitalization Fund</u>—The Plan invests in a Wasatch fund that is focused on small-capitalization equity securities that are located in non-U.S. emerging markets. The Wasatch fund is a commingled investment trust that is managed for institutional investors. The fund is classified in Level 2 of the fair value hierarchy, as the holdings of the fund are all priced at quoted market prices in active markets, allowing the fund sponsor to develop daily net asset value pricing and liquidity.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## Investments Measured at Fair Value, Continued

<u>Fair Value of Private Equity</u>—The Plan participates in a number of private equity partnerships as a limited partner. Private equity investments are structured to be operated by a general partner, usually highly experienced in the specific focus of the fund, who calls for investments from the limited partners when a suitable investment opportunity arises. As such, investments in private equity can generally never be redeemed, but instead participate in distributions from the fund as liquidation of the underlying assets are realized.

Several of the limited partnerships invest in equity securities outside of 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. In addition, some of the partnerships may engage in hedging transactions involving derivative instruments as a part of their investment strategy.

The Plan's private equity (PE) investments have a long investment horizon of 5 to 10 years, are not liquid, and the Plan generally holds this type of investment to maturity. Depending on the type of holdings within a given partnership, the investment horizon can be extended if the general partner deems the remaining investments in the fund still hold significant future value and a majority of limited partners concur. The Plan's PE general partners typically make fair value determinations on the investments in each of their respective funds quarterly using a variety of pricing techniques including, but not limited to, observable transaction values for similar investments, third-party bids, appraisals of both properties and businesses, and public market capitalization of similar or like businesses. Each PE fund then calculates the fair value of the Plan's ownership of the partners' capital on a quarterly basis. The Plan classifies all private equity investments in Level 3 of the fair value hierarchy, as most investments of this type require unobservable inputs and other ancillary market metrics to determine fair value. Although most PE interests are marketable in a secondary market, the Plan generally does not sell its interests early at values less than its interest in the partnership.

At June 30, 2020, the Plan was invested in 73 different private equity strategies (9 of which were in real estate PE) and had remaining commitments of \$318 million for the non-real estate PE partnerships and \$42 million for the real estate PE partnerships. The Plan entered into 10 new private equity partnership agreements during fiscal year 2020 (10 non-real estate PE partnerships), 9 which have an average contract maturity of 10 years, and 1 with a 3-year maturity. These new PE investments will require total commitments of \$185 million.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## **Investments Measured at Fair Value, Continued**

Fair Value of Private Equity—Continued

The Plan had commitments of \$175 million remaining at June 30, 2020, to PE partnership investments entered into prior to 2020, with an estimated maturity between 1 and 9 years. Since the Plan follows a rolling year PE strategy, new PE investments are made as older PE investments reach their expiration.

At June 30, 2019, the Plan was invested in 68 different private equity strategies (9 of which were in real estate PE) and had remaining commitments of \$189 million for the non-real estate PE partnerships and \$55 million for the real estate PE partnerships. The Plan entered into 6 new private equity partnership agreements during fiscal year 2019 (4 non-real estate PE partnerships), 5 which have an average contract maturity of 10 years, and 1 with a 3-year maturity. These new PE investments will require total commitments of \$101.6 million.

The Plan had commitments of \$142.7 million remaining at June 30, 2019, to PE partnership investments entered into prior to 2019, with an estimated maturity between 2 and 9 years. Since the Plan follows a rolling year PE strategy, new PE investments are made as older PE investments reach their expiration.

The Plan is invested in the following private equity strategies:

BUYOUT—This private equity strategy seeks to invest capital in mature businesses that have the potential for growth in value from efficiencies gained through structural, strategic management, and operational improvements.

DISTRESSED—Under the distressed strategy, a fund will invest in the debt of companies that are struggling, with the intent of influencing the process by which the company restructures its debt, narrows its focus, or implements a plan for a turnaround in its operations. Distressed investments of this nature can be debt, equity, or other types of lending.

MEZZANINE—Private equity funds that pursue the mezzanine strategy will usually make unsecured loans or purchase preferred equity, often in smaller capitalization companies, where the unsecured risk is typically offset by the prospect of higher returns.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## **Investments Measured at Fair Value, Continued**

Fair Value of Private Equity—Continued

VENTURE CAPITAL—The venture strategy primarily seeks to invest in early-stage, high-potential, high-growth companies. This type of investment is usually through equity ownership in the company, where the private equity general partner can lend expertise and facilitate growth. Investment returns are usually realized if the portfolio company is taken public through an IPO or the fund may sell its equity investment to another investor.

EMERGING MARKETS AND OTHER—Private equity investment in emerging markets may make use of one or more of the above-listed strategies in smaller global markets in an effort to realize returns by identifying and capitalizing on new startup companies, as well as market inefficiencies. Investments in the other category are generally highly focused private equity funds that seek to maximize returns through a specific market segment, such as energy or healthcare.

FUND OF FUNDS—Under a fund of funds private equity investment, the general partner seeks to build a combination of private equity investments that will work synergistically together to maximize returns and minimize the risk of loss.

REAL ESTATE—Private equity investment in real estate may encompass several of the above-mentioned strategies, based on the skill and experience of the general partner. Generally, real estate private equity investments seek to capitalize on distressed situations, as well as seek to identify lucrative investments that produce a high level of current income. The Plan is invested with 6 separate private equity real estate managers, some with more than one fund by a given manager. The Plan's managers are Siguler Guff, The Realty Associates, Cerberus, Angelo Gordon, Blackstone, and Hall Capital Partners. The fair value of real estate investments are determined by each manager respectively at each valuation date and rely primarily on third-party appraisals and other unobservable inputs. Siguler Guff's advisory board may request an independent appraisal of any portfolio investment within 30 days of the fund's audited financial statements. Associates utilizes independent appraisers to value properties at a frequency of no less than once every 3 years after acquisition. Cerberus follows detailed internal valuation policies and procedures and may engage independent valuation consultants on an as-needed basis. Angelo Gordon property values will be estimated by the general partner; however, an advisory committee can request an independent valuation on any property if one has not been performed in the previous 12 months. Blackstone as general partner will value properties internally with the added consent of an LP advisory committee. Hall Capital Partners values investments in the fund on an income approach rather than base valuations on cyclical appraisals.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

## **Investments Measured at Fair Value, Continued**

Fair Value of Investments Measured at Net Asset Value (NAV)

<u>Low Volatility Hedge Fund—PAAMCO</u>—The Plan is invested in a hedge fund managed by Pacific Alternative Asset Management Company (PAAMCO) structured as a fund of funds to manage and moderate volatility of the value of the investment. The fund uses a number of sub-managers to achieve its desired level of diversification, but is limited to a maximum number of 55 sub-managers. This fund uses a multitude of investment strategies and will invest in debt, equities, credit instruments, distressed debt, merger arbitrage, and sovereign and convertible debt, as well as take both long and short equity positions. This investment is valued at NAV monthly and provides quarterly redemptions with at least 60 days' written notice.

<u>Low Volatility Hedge Fund—Wellington Global Total Return (GTR) Fund</u>—The Plan invested in Wellington's Global Total Return Fund in fiscal year 2017. The GTR Fund is an absolute return fund designed to be without directional dependence, or correlation to, equities, bonds and credit markets. The fund pursues opportunistic strategies in long/short exposure to global interest rates, currencies and credit, and will invest globally to pursue this strategy. This investment is valued at NAV daily and provides daily liquidity.

Long/Short Equity Hedge Fund—Grosvenor Class A & B—The Plan has two hedge fund investments with Grosvenor Capital Management. Both of these investments are structured as fund of funds and utilize a number of sub-managers that invest in long and short positions of U.S. and international equity securities. The Class A investment is highly diversified and will generally have between 20 and 30 sub-managers at any given time that will be selected and managed by Grosvenor at its discretion. The Class B investment is more concentrated and will generally have 15 or fewer sub-managers that are selected by the System's investment consultant, ACG, with confirmation by Grosvenor and the approval of the System's Board. Grosvenor does not have primary investment discretion over the Class B shares, but performs due diligence on the investment for addition to their menu of investible funds. While the Class A investment takes a more market neutral approach to allocations, the Class B investment is designed to capture more upside movement within the markets and has a greater focus on long bias positions. These funds are valued at NAV monthly, and the Class A shares are redeemable at the end of each calendar quarter with 70 days' prior written notice. The Class B shares are redeemable at any time, subject to any gates or lockups by the underlying sub-managers. Due to these gates and lockups, the Class B fund would be able to liquidate varied amounts quarterly over the next 4 quarters; 88.15%, or \$149 million, could be liquidated by June 30, 2020, with the remaining balance to follow in successive quarters as the remaining lockups expire.

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

#### **Investments Measured at Fair Value, Continued**

Fair Value of Investments Measured at Net Asset Value (NAV), Continued

Long/Short Equity Hedge Fund—Grosvenor Class A & B—Continued

In late 2019, the Board voted to re-weight its allocation to Long/Short Hedge funds. In fiscal 2020 the Plan began a full exit from both Grosvenor Classes A and B. At fiscal year end, the Plan had fully exited Grosvenor Class B. The proceeds from this exit were moved to a new hedge fund manager, K2 Mauna Kea. The full exit from Grosvenor Class A will be completed in fiscal 2021. Some proceeds from Grosvenor Class A will also be moved to the new hedge fund platform to bring the hedge fund allocation to investment policy targets.

<u>K2 Mauna Kea Hedge Fund</u>—The Plan has moved a portion of the assets from Grosvenor Classes A and B to K2 Mauna Kea. This investment is structured as a hedge fund of funds and utilizes sub-managers that have been approved to join the K2 Mauna Kea platform. This allocation will generally have between 10 and 15 sub-managers that are selected by the System's investment consultant, ACG, with confirmation by the System's Board. Any new fund new to the K2 Mauna Kea platform must also pass all K2's due diligence requirements to be listed on the platform as an eligible fund. The K2 Mauna Kea allocation is designed to have a long-bias intended to capture more upside movements in the markets. The underlying funds are valued at NAV monthly and withdrawals are allowable at any time subject to gates and redemption windows that vary by underlying sub-manager. Due to these gates and redemption windows, a full exit from the K2 Mauna Kea platform would take approximately 4 quarters.

<u>Core Real Estate—JP Morgan Strategic Property Fund and Blackstone Property Partners</u>—The Plan invests in two core real property funds: the JP Morgan Strategic Property fund and the Blackstone Property Partners Limited Partnership. Both of these funds invest in core real properties seeking to realize capital appreciation on its portfolio while also generating a high level of current income. These funds both make strategic property acquisitions primarily in the U.S. As part of JPMorgan's and Blackstone Property Partners' valuation process, independent appraisers value properties on an annual basis (at a minimum). Both funds are valued at NAV monthly. The JP Morgan fund allows withdrawals <u>once per quarter subject to "available cash" as determined by a pool trustee with 45 days' advance</u> written notice. The Blackstone Property Partners fund has an initial lockup period of 24 months, after which withdrawals are available at the end of each quarter with 90 days' advance written notice. The Plan's lockup period in the Blackstone Property partnership expired on December 31, 2017.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (4) CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED

# **Investments Measured at Fair Value, Continued**

Fair Value of Investments Measured at Net Asset Value (NAV), Continued

Commodities—Gresham Partners (TAP Fund) and MLM Macro Peak—The Plan has investments in two commodities funds with distinctly different approaches. The Gresham TAP (Tangible Asset Program) fund is a commingled investment fund that invests in long-only, fully collateralized tangible commodity futures. It seeks to provide diversification to a portfolio of traditional investments through low correlation to stocks and bonds, and trades across most commodities markets. The MLM Macro-Peak Fund, structured as a liquid limited partnership, is a global macro strategy managed by Mount Lucas. This fund trades in the world's major asset classes and financial markets, including equity, global fixed income, currency, and commodity sectors following internally developed proprietary trading models. Both of these funds are priced at NAV on a monthly basis. The Gresham TAP Fund offers monthly liquidity with at least 5 days' written notice. The MLM Macro-Peak Fund also offers monthly liquidity with at least 10 days' written notice. Under the MLM Macro-Peak Fund, 90% of the cash proceeds are ordinarily paid within 10 days, with the remaining 10% balance paid within 60 days.

In fiscal 2020, the Plan made a complete exit from the Gresham Partners (TAP Fund) and re-allocated the proceeds from this redemption to other existing investments

#### **Foreign Currency Transactions**

The Plan has certain investment managers that trade on foreign exchanges. Foreign currency gains and losses are calculated at the transaction date using the current exchange rate, and assets are remeasured to U.S. dollars using the exchange rate as of each month end. During the years ended June 30, 2020 and 2019, there were no foreign currency gains and no remeasurement losses.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (4) <u>CASH, CASH EQUIVALENTS, AND INVESTMENTS, CONTINUED</u>

#### **Securities Lending**

The Plan's investment policy and state statute allow for participation in a securities lending program which was implemented on July 1, 2019. The program is administered by its master Lendable securities (U.S. equities, U.S. corporate bonds, and U.S. government instruments) within the Plan are loaned to contractually approved brokers who provide collateral in the form of cash, U.S. Treasury or government agency securities, industrialized country governmental and bank securities, and domestic and foreign equities or corporate bonds. Cash or dollar denominated securities provided as collateral must represent 102% of the fair market value of securities on loan. Foreign currency denominated collateral must represent 105% of the fair market value of securities on loan. The Plan cannot pledge or sell collateral securities without a borrower default. The Plan has no restrictions on the amount of securities that may be loaned, and the custodian has indemnified the Plan by agreeing to provide replacement securities or cash in the event of a borrower default. There were no such failures in fiscal 2020. This indemnification does not cover market losses the Plan could incur by investing the security lending cash collateral. The loan premium paid by the borrower of securities, as well as related program fees and costs, are apportioned between the Plan and its custodian in accordance with the securities lending agreement.

For the fiscal year, the Plan and the borrowers retained the right to terminate any and all securities lending transactions on demand. The cash collateral received for loans was invested by the Plan's custodian in a separately managed account. Investments made with cash collateral, as well as their duration, are limited to securities outlined in the securities lending agreement. At June 30, 2020, the average duration of securities held with cash collateral was 1 day. Since the security loans are terminable at will, their duration generally does not match the duration of investments made with cash collateral. At June 30, 2020, the Plan had no credit risk exposure to borrowers since the amounts the Plan owes to borrowers exceed the amounts borrowers owed to the Plan. The collateral held and the fair value of securities on loan at June 30, 2020, were as follows:

			Market Value of	Percent of
	Coll	ateral Held	Securities on Loan	Collateral to Loan
		(Amounts in	Thousands)	
Securities on loan with:				
Cash collateral	\$	12,277	11,987	102%
Non-cash collateral		58,449	52,082	112%
	\$	70,726	64,069	

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

## (5) <u>DERIVATIVES AND OTHER INSTRUMENTS</u>

Derivative instruments are financial contracts whose values depend on the values of one or more underlying assets, reference rates, or financial indexes. They include futures contracts, swap contracts, options contracts, and forward foreign currency exchange. The Plan's investment policy notes that in order to achieve maximum returns, the Plan may diversify between various investments, including common stocks, bonds, real estate, private equity, venture equity and other hedge fund strategies, short-term cash instruments, and other investments deemed suitable. The investment policy also requires investment managers to follow certain controls and documentation and risk management procedures. The Plan did not have any direct derivative investments at June 30, 2020 or 2019. Investments in limited partnerships (alternative investments) and commingled funds may include derivatives. The Plan's investments in alternative investments are reflected at fair value, and any exposure is limited to its investment in the partnership and any unfunded commitment. Commingled funds have been reviewed to ensure they are in compliance with the Plan's investment policy.

The Plan invests in mortgage-backed securities, which are reported at fair value in the statements of fiduciary net position and are based on the cash flows from interest and principal payments by the underlying mortgages. As a result, they are sensitive to prepayments by mortgages, which are likely in declining interest rate environments, thereby reducing the values of these securities. The Plan invests in mortgage-backed securities to diversify the portfolio and increase the return while minimizing the extent of risk. Details regarding interest rate risks for these investments are included under the interest rate risk disclosures.

#### (6) <u>INVESTMENT IN BUILDING</u>

The Plan owns a building (Columbus Square) originally purchased for approximately \$1.5 million, and it is held as a long-term investment. The building is accounted for at fair value based on periodic appraisals. Rental income and expenses associated with the building are reported currently. The Plan utilizes part of the building for its administrative offices and charges itself rent, which is reflected as administrative expense and other investment income. The fair value of the building at June 30, 2020 and 2019 was estimated at approximately \$4.1 million and \$4.3 million, respectively.

# NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (7) <u>CAPITAL ASSETS</u>

The Plan has only one class of capital assets, consisting of software. A summary as of June 30 is as follows:

	Balance at <u>June 30, 2019</u>	Additions	<u>Disposals</u>	Balance at June 30, 2020
Cost Accumulated amortization	\$ 1,014,045 (1,014,045)	- -		1,014,045 (1,014,045)
Capital assets, net	<u> </u>			
	Balance at June 30, 2018	Additions	<u>Disposals</u>	Balance at June 30, 2019
Cost Accumulated amortization	\$ 1,014,045 (1,014,045)	- -	<u>-</u>	1,014,045 (1,014,045)
Capital assets, net	<u> </u>	_		

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (8) <u>DEFERRED OPTION BENEFITS</u>

As noted previously, the Plan has Deferred Option, "Back" DROP, and Payout Provision benefits available to its members. A summary of the changes in the various options as of June 30 is as follows:

	2020				
	De	eferred	"Back"	Payout	
	<u>C</u>	Option	<u>DROP</u>	<b>Provision</b>	<u>Total</u>
		_	(Amounts in	Thousands)	
Beginning balance	\$	720	3,796	1,693	6,209
Employer contributions		19	2,604	-	2,623
Plan reassignments		-	-	-	-
Member contributions		-	3,207	-	3,207
Deferred benefits		144	24,332	-	24,476
Payments		(500)	(39,788)	(696)	(40,984)
Interest		30	6,028	14	6,072
Ending balance	\$	413	179	1,011	1,603
			201		
	D	eferred	"Back" Payout		
	<u>C</u>	Option	<u>DROP</u>	<u>Provision</u>	<u>Total</u>
			(Amounts in	Thousands)	
Beginning balance	\$	2,170	1,265	1,392	4,827
Employer contributions		41	2,367	-	2,408
Plan reassignments		(209)	(58)	267	-
Member contributions		-	2,914	-	2,914
Deferred benefits		294	21,335	-	21,629
Payments		(1,679)	(29,435)	-	(31,114)
Interest		103	5,408	34	5,545
Ending balance	\$	720	3,796	1,693	6,209

## NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (9) <u>NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS</u>

The components of the net pension liability of the participating employers at June 30 were as follows:

	2020 (Amounts in T	2019 housands)
Total pension liability Plan fiduciary net position	\$ 2,736,156 2,621,311	2,612,473 2,618,857
Employers' net pension liability (asset)	\$ 114,845	(6,384)
Plan fiduciary net position as a percentage of the total pension liability	<u>95.80</u> %	<u>100.24</u> %

Actuarial assumptions—The total pension liability was determined by an actuarial valuation as of July 1, 2020 and 2019, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Inflation: 2.75%

Salary increases: 3.5% to 12.0% average, including inflation

Investment rate of return: 7.5%, net of pension plan investment expense

Cost-of-living adjustments: Police officers eligible to receive increased benefits according to

repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order receive an adjustment of 1/3 to 1/2 of the increase or decrease of any adjustment to the base salary of a regular police officer, based on an increase in base salary of

3.5% (wage inflation).

Mortality rates: Active employees (pre-retirement): RP-2000 Combined

Blue Collar Healthy Table with age set back 4 years with

fully generational improvement using Scale AA.

Active employees (post-retirement) and nondisabled

pensioners: RP-2000 Combined Blue Collar Healthy Table

with fully generational improvement using scale AA.

Disabled pensioners: RP-2000 Combined Blue Collar Healthy

Table with age set forward 4 years.

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

# (9) <u>NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS, CONTINUED</u>

The actuarial assumptions used in the July 1, 2020 and 2019, valuations were based on the results of an actuarial experience study for the period of July 2012 to June 2017.

The long-term expected rate of return on pension plan investments was determined using a building-block method 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 Plan will fully exit its commodities allocation in fiscal 2021 and has accordingly set that long-term return expectation at 0.00%. The inflation factor added back was 2.0% for both 2020 and 2019. Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation as of June 30 (see discussion of the pension plan's investment policy at Note 2) are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return			
	2020	2019		
	(includes infl	ation factor)		
Fixed income	5.11%	4.79%		
Domestic equity	6.80%	5.74%		
International equity	11.45%	9.19%		
Real estate	8.60%	7.99%		
Private equity	11.58%	10.20%		
Commodities	0.00%	3.50%		

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

### (9) <u>NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS, CONTINUED</u>

Discount rate—The discount rate used to measure the total pension liability was 7.5% for 2020 and 2019. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from employers will be made at contractually required rates, determined by the Oklahoma Statutes. Projected cash flows also assume the State of Oklahoma will continue contributing 14% of the insurance premium, as established by statute. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate—The following presents the net pension liability of the employers, calculated using the discount rate of 7.5%, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.5%) or 1 percentage point higher (8.5%) than the current rate:

	19	6 Decrease	Current Discount	1% Increase
		(6.5%)	Rate (7.5%)	(8.5%)
		(A	mounts in Thousand	(s)
<u>2020</u>				
Employers' net pension liability (asset)	\$	405,701	114,845	(131,158)
2019				
Employers' net pension liability (asset)	\$	271,956	(6,384)	(241,724)

#### (10) PLAN TERMINATION AND STATE FUNDING

The Plan has not developed an allocation method if it were to terminate. The Oklahoma Legislature is required by statute to make such appropriation as necessary to assure that benefit payments are made.

A suggested minimum contribution from the State of Oklahoma is computed annually by an actuary hired by the State of Oklahoma. However, funding by the State of Oklahoma to the Plan is based on statutorily determined amounts rather than the actuarial calculations of the amount required to fund the Plan.

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (11) <u>FEDERAL INCOME TAX STATUS</u>

As an instrumentality of the State of Oklahoma, the Plan is tax-exempt. It is not subject to the Employee Retirement Income Security Act of 1974, as amended. The Plan has received favorable determination from the Internal Revenue Service (IRS) regarding its tax-exempt status. The Plan has been amended since receiving the determination letter. However, the plan administrator believes that the Plan is designed and is currently being operated in substantial compliance with the applicable requirements of the Internal Revenue Code.

## (12) <u>HISTORICAL INFORMATION</u>

Historical trend information designed to provide information about the Plan's progress made in accumulating sufficient assets to pay benefits when due is presented in Exhibits I, II, III, and IV.

### (13) <u>LEGISLATIVE AMENDMENTS</u>

The following is a summary of significant plan provision changes that were enacted by the Oklahoma Legislature during 2020 and 2019:

#### 2020

- House Bill 3330—Provides that members who are injured in the performance of duties as a police officer by a violent act will be eligible for the State Board to assess that the member has sustained a one-hundred-percent disability for the determination of a benefit. HB 3330 further defines a violent act as "a violent attack on the member by means of a dangerous weapon, including, but not limited to, a firearm, knife, automobile, explosive device, or other dangerous weapon."
- House Bill 3350—Provides a cost-of-living adjustment (COLA) to any person receiving a benefit from the System and who continues to receive a benefit on or after July 1, 2020, based on the following retirement dates: Zero (0%) if the person was retired 2 years or less on July 1, 2020; Two (2%) if the person has been retired for at least 2 years but less than 5 years as of July 1, 2020 and; Four (4%) if the person has been retired for 5 years or more on July 1, 2020. This COLA is offset by any increase in benefits a person received pursuant to repealed Section 50-120 of Title 11 of the Oklahoma Statutes after June 30, 2008.

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

#### NOTES TO FINANCIAL STATEMENTS, CONTINUED

#### (13) LEGISLATIVE AMENDMENTS, CONTINUED

### <u>2019</u>

• House Bill 2269—Provides that participants in the Deferred Option Plan (DOP) can name a designated recipient; if there is no such designation, the surviving spouse (having been married to the participant for the 30 continuous months preceding death) will be the eligible recipient. The 30-month requirement does not apply in the event of a duty related death. If neither a named recipient nor a surviving spouse is an eligible recipient, payment will be made to the estate of the participant. HB 2269 further provides that the Council on Law Enforcement Education and Training (CLEET) will grant the Board access to records regarding actively working police officers in participating agencies and municipalities. Lastly HB 2269 allows for the final benefit payment due a member in the month they are deceased to be paid to a successor-in-interest provided it is less than the limits set in Title 58 § 393 of the state statutes.

### (14) CONTINGENCIES

The Plan is involved in legal proceedings in the normal course of operations, none of which, in the opinion of management, will have a material effect on the net position or changes in net position of the Plan.

The novel coronavirus ("COVID-19"), which was declared a global health emergency in January 2020 and a pandemic in March 2020, has caused significant changes in political and economic conditions around the world, including disruptions and volatility in the global capital markets. In response, the State of Oklahoma and local municipalities have taken various preventative or protective actions, such as imposing restrictions on business operations and advising or requiring individuals to limit or forgo their time outside of their homes. The Plan's management has considered the economic implications of the COVID-19 pandemic in making critical and significant accounting estimates included in the June 30, 2020, financial statements.

The extent to which the COVID-19 pandemic may impact the Plan will depend on future developments which are uncertain, such as the duration of the outbreak, additional governmental mandates issued to mitigate the spread of the disease, business closures, economic disruptions, and the effectiveness of actions taken to contain and treat the virus. Accordingly, the COVID-19 pandemic may have a negative impact on the Plan's future operations, the size and duration of which is difficult to predict. The Plan's management will continue to actively monitor the situation and may take further actions altering operations that the Plan's management determines are in the best interests of its employees and stakeholders, or as required by federal, state, or local authorities.

Oklahoma	Police	Pension	ጲ	Retirement System	
Oklanoma	1 Olloc	I CHOIGH	u	Tremented by stern	

REQUIRED SUPPLEMENTARY INFORMATION

### Exhibit I

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

## SCHEDULE OF CHANGES IN EMPLOYERS' NET PENSION (ASSET) LIABILITY

Last 10 Fiscal Years (Dollar Amounts	in Thousands)									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
<b>Total pension liability</b>										
Service cost	\$ 68,239	64,777	62,896	63,029	58,695	54,592	53,042	56,160	54,059	66,974
Interest	189,926	182,961	175,092	171,306	165,076	164,141	159,256	150,394	144,742	174,238
Changes of benefit terms	43,716	-	2,161	-	-	-	-	-	-	-
Differences between expected										
and actual experience	-	4,410	(13,155)	(41,985)	596	(12,764)	(18,258)	7,194	(10,069)	(96,100)
Changes in assumptions	(15,005)	-	25,307	-	-	-	-	(2,444)	-	(422,901) *
Benefit payments, including										
refunds of member contributions	(163,193)	(155,486)	(139,563)	(144,092)	(138,625)	(141,693)	(119,241)	(114,835)	(113,300)	(104,044)
Net change in total pension liability	123,683	96,662	112,738	48,258	85,742	64,276	74,799	96,469	75,432	(381,833)
Total pension liability—beginning	2,612,473	2,515,811	2,403,073	2,354,815	2,269,073	2,204,797	2,129,998	2,033,529	1,958,097	2,339,930
Total pension liability—ending (a)	\$ 2,736,156	2,612,473	2,515,811	2,403,073	2,354,815	2,269,073	2,204,797	2,129,998	2,033,529	1,958,097

<sup>\*</sup>The decrease was due to legislation which changed the actuarial assumptions to no longer include cost-of-living adjustments (COLA's).

(Continued)

See Independent Auditors' Report.

#### **Exhibit I, Continued**

# OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

## SCHEDULE OF CHANGES IN EMPLOYERS' NET PENSION (ASSET) LIABILITY, CONTINUED

#### Last 10 Fiscal Years (Dollar Amounts in Thousands) 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 Plan fiduciary net position Contributions—employers (cities) 44,226 42,154 40,135 38,887 38,533 37,261 35,547 34,645 32,896 31,846 Contributions—members 27,310 26,173 24,747 23,916 23,787 22,867 22,131 21,518 20,113 19,489 Contributions—State of Oklahoma. 40,295 39,559 39,028 34,283 35,915 35,490 31.329 31,412 28,092 24,645 a non-employer contributing entity Net investment income (loss) 55,808 104,882 205,439 242,415 (21,104)74,554 294,897 221,174 8,374 282,305 Benefit payments, including refunds of member contributions (163,193)(155,486)(139,563)(144,092)(138,625)(141,693)(119,241)(114,835)(113,300)(104,044)Administrative expense (1,992)(1,871)(1,721)(1,699)(1,831)(1,949)(1,862)(2,053)(1,952)(1,712)Net change in plan fiduciary net position 2,454 55,411 168,065 193,710 (63,325)26,530 262,801 191,861 (25,777)252,529 2,618,857 2,563,446 2,395,381 2,201,671 2,264,996 2,238,466 1,975,665 1,783,804 1,809,581 1,557,052 Plan fiduciary net position—beginning Plan fiduciary net position—ending (b) \$ 2,621,311 2,618,857 2,563,446 2,395,381 2,201,671 2,264,996 2,238,466 1,975,665 1,783,804 1,809,581 7,692 153,144 4,077 154,333 249,725 \$ 114,845 (6,384)(47,635)(33,669)148,516 Plan's net pension liability (asset) (a) - (b)

See Independent Auditors' Report.

### **Exhibit II**

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

## SCHEDULE OF EMPLOYERS' NET PENSION (ASSET) LIABILITY Last 10 Fiscal Voors (Dollar Amounts in Thousands)

Last 10 Fiscal Years (Dollar Amounts in	n Thousands)									
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Total pension liability Plan fiduciary net position	\$ 2,736,156 2,621,311	2,612,473 2,618,857	2,515,811 2,563,446	2,403,073 2,395,381	2,354,815 2,201,671	2,269,073 2,264,996	2,204,797 2,238,466	2,129,998 1,975,665	2,033,529 1,783,804	1,958,097 1,809,581
Plan's net pension liability (asset)	\$ 114,845	(6,384)	(47,635)	7,692	153,144	4,077	(33,669)	154,333	249,725	148,516
Plan fiduciary net position as a percentage of the total pension liability (asset)	95.80%	<u>100.24</u> %	<u>101.89</u> %	<u>99.68</u> %	<u>93.50</u> %	<u>99.82</u> %	<u>101.53</u> %	<u>92.75</u> %	<u>87.72</u> %	<u>92.42</u> %
Covered payroll	\$ 340,200	324,262	308,731	299,131	296,408	295,307	289,502	279,014	266,038	257,505
Plan's net pension liability (asset) as a percentage of covered payroll	<u>33.76</u> %	( <u>1.97</u> )%	( <u>15.43</u> )%	<u>2.57</u> %	<u>51.67</u> %	<u>1.38</u> %	( <u>11.63</u> )%	<u>55.31</u> %	<u>93.87</u> %	<u>57.67</u> %

See Independent Auditors' Report.

## **Exhibit III**

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

## SCHEDULE OF CONTRIBUTIONS FROM EMPLOYERS AND OTHER CONTRIBUTING ENTITIES

Last 10 Fiscal Years (Dollar Amounts	in T	housands)									
		2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Actuarially determined contribution  Contributions in relation to the	\$	39,475	36,720	32,798	51,417	45,054	63,908	90,283	79,314	64,746	146,816
actuarially determined contribution: Employers (Cities) State of Oklahoma, a non-employer		44,226	42,154	40,135	38,887	38,533	37,261	35,547	34,645	32,896	31,846
contributing entity		40,295	39,559	39,028	34,283	35,915	35,490	31,329	31,412	28,092	24,645
		84,521	81,713	79,163	73,170	74,448	72,751	66,876	66,057	60,988	56,491
Contribution (excess) deficiency	<u>\$</u>	(45,046)	(44,993)	(46,365)	(21,753)	(29,394)	(8,843)	23,407	13,257	3,758	90,325
Covered payroll	<u>\$</u>	340,200	324,262	308,731	299,131	296,408	295,307	289,502	279,014	266,038	257,505
Contributions as a percentage of covered payroll		<u>24.84</u> %	<u>25.20</u> %	<u>25.64</u> %	24.46%	<u>25.12</u> %	<u>24.64</u> %	23.10%	23.68%	<u>22.92</u> %	<u>21.94</u> %

See Independent Auditors' Report.

**Exhibit IV** 

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

#### SCHEDULE OF INVESTMENT RETURNS

<b>Last 8 Fiscal Years</b>								
	2020	2019	2018	2017	2016	2015	2014	2013
Annual money-weighted rate of return, net of								
investment expense	2.15%	4.12%	8.64%	11.11%	(0.94)%	3.36%	15.04%	12.56%

Information to present a 10-year history is not readily available.

See Independent Auditors' Report.

#### Exhibit V

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

#### NOTES TO REQUIRED SUPPLEMENTARY INFORMATION

June 30, 2020

The information presented in the required supplementary schedules was determined as part of an actuarial valuation by an independent enrolled actuary (Cavanaugh Macdonald Consulting, LLC for 2020, 2019, and 2018, and by Buck Consultants, LLC for all other years presented) at the dates indicated. Additional information as of the July 1, 2020, valuation follows:

### **Assumptions**

Actuarial cost method: Entry age

Amortization method: Level dollar—open

Remaining amortization: 30 years

Asset valuation method: 5-year smoothed

Actuarial assumptions:

Investment rate of return: 7.5%, net of pension plan investment expense

Projected salary increases\*: 3.5% to 12.0%

Cost-of-living adjustments: Police officers eligible to receive increased benefits according

to repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order receive an adjustment of 1/3 to 1/2 of the increase or decrease of any adjustment to the base salary of a regular police officer, based on an

increase

in base salary of 3.5% (wage inflation).

<sup>\*</sup> Includes inflation at 3.5%.

	Oklahoma Police Pension & Retirement System

## SUPPLEMENTARY INFORMATION

## Schedule I

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

## SCHEDULE OF INVESTMENT EXPENSES

Years Ended June 30,		2020	2019
	(A	Amounts in Th	ousands)
Investment management fees:			
Fixed income managers:			
Global Fixed Income	\$	1,279	1,244
Low Volatility		989	1,773
Equity managers:			
Domestic Equity		2,555	3,009
International Equity		2,374	2,010
Private Equity		5,355	3,450
Real estate:			
Real estate		3,407	2,880
Commodities		339	664
Total investment management fees		16,298	15,030
Investment consultant fees		650	650
Investment custodial fees		199	193
Total investment expenses	<u>\$</u>	17,147	15,873

## Schedule II

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

### SCHEDULE OF ADMINISTRATIVE EXPENSES

Years Ended June 30,	2020	2019
	(Amounts	in Thousands)
Staff salaries	\$ 90.	3 865
FICA and retirement	21	8 204
Insurance	11:	5 114
Total personnel services	1,23	6 1,183
Actuarial	4-	4 45
Audit	7	8 63
Information Technology	7	6 69
Legal	21:	3 139
Legislative consulting		_ 22
Total professional/consultant services	41	338
Office space and equipment	10.	3 105
Total rental	10	3 105
Travel	4	0 82
Maintenance	7	0 49
Other	133	2 114
Total miscellaneous	24.	2 245
Total administrative expenses	\$ 1,992	21,871

## **Schedule III**

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN Administered by OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

## SCHEDULE OF PROFESSIONAL/CONSULTANT FEES

Years Ended June 30,		2020	2019
		(Amounts i	n Thousands)
Professional/Consultant	<u>Service</u>		
Cavanaugh MacDonald Consulting	Actuarial	44	45
Finley & Cook, PLLC	Audit	62	63
Crawford & Associates	Audit	16	-
Levi, Ray and Shoup	IT\Web hosting	76	69
Davis, Graham, Stubbs, LLP	Legal	71	44
Phillips Murrah, PC	Legal	142	72
Attorney General	Legal	-	23
Majority Plus, LLC	Legislative Consulting		22
		\$ 411	338



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**Investment Section** 

## ACG | ASSET CONSULTING GROUP

#### REPORT ON INVESTMENT ACTIVITIES

October 14, 2020

In our role as investment consultant to the Oklahoma Police Pension & Retirement System's (OPPRS) Board, Asset Consulting Group works in tandem with the Board to establish and maintain an Investment Policy and asset allocation strategy that are designed to meet the long-term objectives of OPPRS. As part of our duties, we meet formally with the Board on a monthly basis to assess the capital markets, the overall investment landscape and the unique considerations of OPPRS. We report on current investment activity, provide perspective on the market environment and make recommendations as appropriate to enhance or modify the investment strategy and/or its component parts. We provide monthly reports and more comprehensive quarterly reports to inform the Board of progress towards meeting the long-term objectives of OPPRS and to highlight areas of interest, opportunity and/or for potential discussion. In addition, we provide education on an ongoing basis in the areas most relevant to the investment objectives and needs of OPPRS. This ongoing collaboration is an effort to maximize the advantages of portfolio diversification, achieve a favorable risk-adjusted return and meet or exceed the long-term actuarial return assumption of 7.5%

Due to the strength of the Retirement System's funded status, the OPPRS investment portfolio has been constructed with an emphasis on risk mitigation and a goal of achieving its long-term return expectation in the most risk-conscious fashion. Special attention is given to reduced volatility and downside portfolio protection. For the fiscal year ending June 30, 2020, the OPPRS' portfolio generated a gross investment return of 2.3%, which trailed the policy benchmark return of 4.4%. Over the 3-year period ending June 30, 2020, the total portfolio has produced an annualized return of 5.2% relative to a return of 6.2% for its policy benchmark. For the recent 10-year period, the OPPRS' portfolio has generated an annualized return of 7.7%, which exceeds the 7.5% actuarial return assumption. The OPPRS' portfolio has achieved its results over each of these time periods with approximately 20% less volatility than that of its benchmark, and OPPRS' risk conscious approach has resulted in a more favorable risk-adjusted return profile than its median peer and benchmark. The calculation methodology used in our performance reports and this investment section is consistent with the methodology prescribed by the CFA Institute, including time-weighted rates of return and the fair market value of assets. In providing these results, we rely on the timeliness and accuracy of financial data provided by the OPPRS' custodian bank and its investment managers.

Total Portfolio Statistics - 10 Years (Annualized)
Periods Ending June 30, 2020

	OPPRS	Total Fund Policy
Return	7.67%	7.88%
Standard Deviation	7.00%	8.71%
Sharpe Ratio	1.01	0.09

## ACG | ASSET CONSULTING GROUP

The major asset category returns are also summarized as follows:

#### Total Portfolio Rates of Return Summary & Universe Comparison

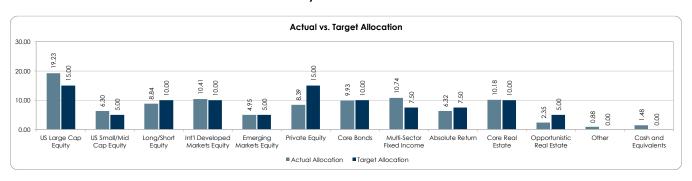
Periods Ending June 30, 2020

	10 Years
Total Fund	7.67%
Policy Index <sup>1</sup>	7.88%
Median Total Fund (55-70% Equity)	8.03%
Total Equity Composite	9.59%
MSCI ACWI	9.74%
Global Bonds Composite	4.36%
BloomBar Universal	4.12%
Real Assets Composite	5.61%
Real Assets Blended Index <sup>2</sup>	4.98%

<sup>1</sup>As of September 2019 <sup>2</sup>As of January 2016 The index consists of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 10.0% NFI ODCE Net, 15.0% NFI ODCE net The index consists of 67% NFI ODCENet, 33% Bloombar Commodity

On an ongoing basis and as appropriate, the OPPRS strategic investment strategy is reviewed and modified following thorough analysis of alternatives evaluated, the unique considerations of OPPRS and the current investment opportunity set. The investment strategy is refined as appropriate to ensure compatibility with the expected long-term return objectives, liability profile of OPPRS and the Board's risk tolerance. The portfolio is highly diversified across asset classes, strategies, styles, geographies, currencies, capitalizations, liquidity, type, number of instruments and other methods. As of June 30, 2020, the OPPRS' targeted asset allocation consisted of:

#### Periods Ending June 30, 2020 Policy Asset Allocation



## ACG | ASSET CONSULTING GROUP

ACG believes that we have collaborated with OPPRS to adopt, implement, maintain and monitor a sound Investment Policy and portfolio strategy. In consideration of OPPRS' healthy funded status, we have worked with the Board to design a portfolio structured to achieve strong risk-adjusted returns while maintaining a protective stance against significant asset loss. This portfolio strategy is monitored and revised on an ongoing basis as appropriate.

Sincerely,

George A. Tarlas, CFA Senior Managing Director

# **Schedule of Largest Assets Held**For the Fiscal Year Ended June 30, 2020

The Plan's ten largest stock, fixed income and partnership holdings at June 30, 2020.

#### Largest Stock Holdings (by Fair Value)

Security	Shares Held	Fair Value
Pacira Biosciences Inc.	31,147	\$ 1,634,283
Caredx Inc.	43,947	1,557,042
Model N Inc.	43,741	1,520,437
Natera Inc.	29,449	1,468,327
Synnex Corp.	11,709	1,402,387
Emergent Biosolutions Inc.	17,366	1,373,303
Lithia Morots Inc.	8,955	1,355,160
Workiva Inc.	24,820	1,327,622
Graphic Packaging Holding Co.	93,140	1,303,029
Neogenomics Inc.	41,815	1,295,429

#### Largest Fixed Income Holdings (by Fair Value)

Security	Par Value	Fair Value
U.S Treasury Bond 4.5% 08/15/2039	8,910,000	\$ 14,190,957
U.S. Treasury Bd Prin Strip 0.0% 05/15/2039	11,635,000	9,424,350
FHLMC Pool #SD-0232 3.0% 01/01/2050	7,472,511	7,903,376
FNMA Pool #0MA3120 3.5% 09/01/2047	5,051,752	5,322,223
FHLMC Pool #G0-8741 3.0% 01/01/2047	4,918,826	5,199,150
FNMA Pool #0MA3210 3.5% 11/01/2047	4,411,981	4,658,921
GNMA II Pool #0MA0783 3.5% 02/20/2043	3,468,214	3,770,781
FNMA Pool #0FM1000 3.0% 04/01/2047	3,501,487	3,704,994
FNMA Pool #0MA2868 2.5% 01/01/2032	3,484,257	3,656,762
FNMA Pool #0BM5024 3.0% 11/01/2048	3,347,218	3,527,700

## Largest Limited Partnership Holdings (by Fair Value)

Limited Partnership	Fair Value
LBC Credit Partners V	\$ 26,026,451
Newstone Capital III	16,662,552
Apollo Accord III	13,613,008
FirstMark Capital I	12,630,916
Francisco Partners Fund IV	11,270,776
FirstMark Capital Opportunities II	11,063,801
Warburg Pincus XII	10,776,480
Weathergage Venture Capital II	10,691,989
North Sky Clean Growth Fund V	10,018,863
FirstMark Capital II	9,622,880

A complete list of portfolio holdings may be requested from the OPPRS Accounting Department at 1001 NW 63rd Street, Suite 305, Oklahoma City, OK, 73116-7335.

## Portfolio by Investment Type and Manager For the Period Ended June 30, 2020

Investment Managers by Investment Type	Investment Fair Value Class (000s)			% of Asset Class (boxed)	% of Total Portfolio
International Equity	Fauity	\$	140 730	11.5%	5.7%
Baring Focused  Mondrian International Equity Fund, LP	Equity	Ş	148,738	9.5%	5. <i>7</i> %
	Equity		122,217	6.7%	3.3%
AllianceBernstein EM Strategic Core	Equity		86,540	3.3%	1.6%
Wasatch Small Cap	Equity		42,192	3.3%	1.6%
Domestic Equity					
Small/Mid Cap					
Boston Partners - Value	Equity		71,705	5.6%	2.7%
Cortina - Growth	Equity		87,466	6.8%	3.4%
Large Cap					
Northern Trust Index Russell 1000	Equity		500,201	38.8%	19.2%
Long/Short Equity					
Grosvenor A and B	Equity		86,060	6.7%	3.3%
K2 Mauna Kea	Equity		143,883	11.2%	5.5%
Delicate Carrière					
Private Equity	F		205.050	(*) 100.00/	44.20/
Various Managers *	Equity		295,859	(*) 100.0%	11.3%
Global Fixed Income					
Agincourt- Core	Fixed Income		255,273	39.9%	9.8%
Oaktree Capital Management	Fixed Income		133,916	20.9%	5.1%
Loomis Sayles	Fixed Income	85,484		13.4%	3.3%
Low Volatility Strategies					
PAAMCO - Newport Mesa	Fixed Income		86,528	13.5%	3.3%
Wellington Global Total Return	Fixed Income		78,151	12.2%	3.0%
Real Assets					
MLM Macro - Peak Partners L.P.	Commodities		22,799	6.6%	0.9%
JP Morgan Core Real Estate	Core RE		150,762	43.4%	5.8%
Blackstone Core Real Estate	Core RE		113,444	32.7%	4.3%
Angelo Gordon Realty Value Fund X	Opportunistic		5,602	1.6%	0.2%
Blackstone Real Estate Partners IX	Opportunistic		5,063	1.5%	0.2%
Cerberus Fund III	Opportunistic		9,123	2.6%	0.3%
Cerberus Fund IV	Opportunistic		12,066	3.5%	0.5%
Columbus Square - Direct Ownership	Opportunistic		4,100	1.2%	0.2%
Siguler Guff - Opportunistic	Opportunistic		3,870	1.1%	0.1%
Siguler Guff II- Opportunistic	Opportunistic		6,491	1.9%	0.2%
Siguler Guff IIB- Opportunistic	Opportunistic		6,215	1.8%	0.2%
Hall Capital III	Opportunistic		5,616	1.6%	0.2%
TA Associates Realty X - Opportunistic	Opportunistic		2,248	0.6%	0.1%
Cash and Cash Equivalents					
OK Invest	Cash & Cash Eq.		5,023	13.4%	0.2%
Cash at BNY Mellon	Cash & Cash Eq.		32,571	86.6%	1.2%
Total Investments and Cash and Cash Equivalents		\$	2,609,206		100.0%

<sup>(\*)</sup> See the following page for a detailed listing of Private Equity Managers.

# Private Equity (PE) by Strategy and Manager For the Period Ended June 30, 2020

Investment Focus and Manager	Market
Private Equity (PE) Investment Focus - Buyout	Value
Apollo Investment Fund VIII Apollo Investment Fund XI	\$ 5,560,428 2,989,852
Arsenal Capital Partners Fund II, L.P.	129,257
Arsenal Capital Partners Fund III, L.P.	1,821,622
Calera Capital Fund IV	(11,414)
CenterOak Equity I	6,755,483
Francisco Partners Fund IV	11,270,776
Francisco Partners Fund V Leonard Green Equity Investors VII	5,882,077 7,826,377
Leonard Green Jade	779,444
Levine Leichtman Capital Partners III, L.P.	65,849
Levine Leichtman Capital Partners IV, L.P.	844,163
Sun Capital Fund V	2,435,529
Thompson Street Capital Partners II GP, LP	2,119,656
Thompson Street Capital Partners III GP, LP Thompson Street Capital Partners VI GP, LP	3,990,741 8,855,290
Thompson Street Capital Partners V GP, LP	4,359,563
Subtotal - Buyout	65,674,693
PE Investment Focus - Distressed	4 520 407
Apollo European Principal Finance Fund III Oaktree Opportunity Fund V	4,539,497 1,597
Oaktree Opportunity Fund VI	129
Oaktree Opportunity Fund VII	53,608
Oaktree Opportunity Fund VIIb	13,516
Oaktree Opportunity Fund VIII	167,972
Oaktree Opportunity Fund IX	4,756,205
Oaktree Opportunity Fund X	6,637,071
Oaktree Opportunity Fund XB	2,944,788 208,509
Oaktree European Dislocation Siguler Guff Distressed Opportunity Fund III	2,863,131
Subtotal - Distressed	22,186,023
PE Investment Focus - Fund of Funds	
Lexington Cap VI-B Subtotal - Fund of Funds	1,322,395 1,322,395
Subtotal - Fulla of Fullas	1,322,393
PE Investment Focus - Mezzanine and Private Credit	
Apollo Accord III	13,613,008
Apollo Accord IIIB	5,085,724
LBC Credit Partners Fund IV  Newstone Capital Partners II, LP	26,026,451 861,365
Newstone Capital Partners III, LP	16,662,552
TCW/Crescent Mezzanine V, L.P.	404,423
Subtotal - Mezzanine	62,653,523
PE Investment Focus - Venture Capital  Accel Europe, L.P.	806,638
FirstMark Cap Opportunity Fund I	7,089,309
FirstMark Cap Opportunity Fund II	11,063,801
FirstMark Cap Opportunity Fund III	735,130
FirstMark Capital Fund I	12,630,916
FirstMark Capital Fund II	9,622,880
FirstMark Capital Fund IV	9,438,306
FirstMark Capital Fund IV KnightsBridge	6,622,842 5,280,840
TA XIII-B	1,477,548
Warburg Pincus X	2,841,661
Warburg Pincus XI	4,035,348
Warburg Pincus XII	10,776,480
Wasthorgage Capital	8,467,200
Weathergage Capital Weathergage Capital II	4,358,665 10,691,989
Weathergage Capital IV	8,907,530
Subtotal - Venture Capital	114,847,083
DE Investment Focus Francisco Mariento	
PE Investment Focus - Emerging Markets Actis 4 Global	4,808,000
Subtotal - Emerging Markets	4,808,000
PE Investment Focus - Other	
ArcLight Energy VI	4,980,144
ArcLight Energy VII	587,723
EnCap Energy Fund IX	2,242,470
EnCap Energy Fund X EnCap Energy Fund XI	4,749,613
North Sky Clean Growth V	1,788,274 10,018,863
Subtotal - Other	24,367,087
Total Private Equity (PE) Investments	\$ 295,858,804

#### OPPRS Private Equity Investments

Private equity investments usually consist of a general partner as the active investor with a number of passive limited partners (like OPPRS) where all contribute to a combined fund and invest according to one of the following strategies:

Buyout - this strategy will invest capital in more mature businesses that have the potential for growth in value from efficiencies gained through structural, strategic management and operational improvements.

Distressed – under this strategy, the general partner will invest in the debt of companies that are struggling, with the intent of influencing the process by which the company restructures its debt, narrows its focus or implements a plan to turn around its operations. Distressed positions can involve debt, equity and lending investments.

Fund of Funds – this strategy combines many different investments approaches into a single investment.

Mezzanine – this strategy typically involves the partnership making either unsecured loans or purchasing preferred equity, often in smaller companies, where the unsecured risk is offset by higher returns.

Venture Capital – this strategy seeks to invest funds in early-stage, high-potential, high growth companies. This type of investment is usually through equity ownership in the developing company.

Emerging Markets – this strategy focuses on investing in companies in emerging economies around the globe.

Other – for this strategy, investments wil usually be concentrated within a specific industry or region.

## **Net Performance Summary by Investment Manager** For the Period Ended June 30, 2020

Mondrian   8.93%   -13.20%   -2.42%   0.02%     MSCI EAFE Net Div			Increating and D	)	
International Equity   Baring Focused   14.87%   -0.21%   3.11%   4.81%   Mondrian   8.93%   -13.20%   -2.42%   0.02%   MSCI EAFE Net Div   14.88%   -5.13%   0.81%   2.05%   3.26%	Investment Managers by Investment Type	One Quarter	_	_	Five Vears
Barring Focused   14.87%   -0.11%   3.11%   4.81%   Mondrian   8.93%   -13.20%   -2.42%   0.02%   MSCI EAFE Net Div   14.88%   -5.13%   0.81%   2.05%   ASCI EAFE Net Div   14.88%   -5.13%   0.81%   2.05%   ASCI EAFE Net Div   14.88%   -5.13%   0.81%   2.05%   ASCI Emerging markets   18.19%   -3.05%   2.27%   3.24%   MSCI Emerging Markets - Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   -2.23%   -16.69%   -4.02%   1.27%   ASCI Emerging Markets Small Cap   -2.233%   -16.69%   -4.02%   1.27%   ASCI Emerging Markets Small Cap   -2.60%   -1.550%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%	investment ivialiagers by investment Type	Offe Quarter	Offe real	Tillee reals	Five rears
Barring Focused   14.87%   -0.11%   3.11%   4.81%   Mondrian   8.93%   -13.20%   -2.42%   0.02%   MSCI EAFE Net Div   14.88%   -5.13%   0.81%   2.05%   ASCI EAFE Net Div   14.88%   -5.13%   0.81%   2.05%   ASCI EAFE Net Div   14.88%   -5.13%   0.81%   2.05%   ASCI Emerging markets   18.19%   -3.05%   2.27%   3.24%   MSCI Emerging Markets - Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   27.24%   -8.47%   -2.62%   -1.06%   ASCI Emerging Markets Small Cap   -2.23%   -16.69%   -4.02%   1.27%   ASCI Emerging Markets Small Cap   -2.233%   -16.69%   -4.02%   1.27%   ASCI Emerging Markets Small Cap   -2.60%   -1.550%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%   1.955%   -2.60%	International Equity				
MSCI EAFE Not Div   14,88%   -5,13%   -0,81%   -2,05%   N/A     All lance Berstein EN Strategic Core   15,13%   -3,48%   -0,59%   N/A     MSCI Emerging markets   18,18%   -3,05%   2,27%   3,24%     Wasatch Emerging Markets - Small Cap   33,24%   18,28%   9,27%   6,02%     MSCI Emerging Markets - Small Cap   27,24%   -8,47%   -2,62%   -1,06%     Domestic Equity Managers     Small/Mid Capitalization Equity     Boston Partners - Value   23,33%   -16,69%   -4,02%   1,27%     Russell 2500 Value   20,00%   15,50%   -2,60%   1,85%     Silvercrest-Growth   43,57%   10,82%   12,24%   11,96%     Russell 2000 Growth   30,58%   3,48%   7,86%   6,86%     Russell 2000 Growth   30,58%   3,48%   7,86%   6,86%     Russell 2000 Growth   21,82%   7,47%   10,64%   10,43%     Russell 2000 Long/Short Equity		14.87%	-0.21%	3.11%	4.81%
AllianceBerstein EM Strategic Core   15.13%   -3.48%   -0.59%   N/A     MSCI Emerging markets   18.18%   -3.05%   2.27%   6.02%     Wasatch Emerging Markets - Small Cap   27.24%   -8.47%   -2.62%   -1.06%     MSCI Emerging Markets - Small Cap   27.24%   -8.47%   -2.62%   -1.06%     MSCI Emerging Markets - Small Cap   27.24%   -8.47%   -2.62%   -1.06%     Domestic Equity Managers   Small/Mid Capitalization Equity     Boston Partners - Value   23.33%   -16.69%   -4.02%   1.27%     Russell 2500 Value   20.60%   -15.50%   -2.60%   1.85%     Silvercrest- Growth   43.57%   10.82%   12.24%   11.96%     Russell 2000 Growth   30.58%   3.48%   7.86%   6.86%     Large Capitalization Equity   Northern Trust Russell 1000 Index Fund   21.82%   7.47%   10.64%   10.48%     Russell 2000 Long/Short Equity   -7.20%   3.41%   4.94%   3.96%     KZ Mauna Kea   14.96%   N/A   N/	Mondrian	8.93%	-13.20%	-2.42%	0.02%
MSCI Emerging markets   18,18%   -3,05%   2,27%   3,24%   MSach Themerging Markets - Small Cap   27,24%   -8,47%   -2,62%   -1,06%   MSCI Emerging Markets Small Cap   27,24%   -8,47%   -2,62%   -1,06%   MSCI Emerging Markets Small Cap   27,24%   -8,47%   -2,62%   -1,06%   MSCI Emerging Markets Small Cap   27,24%   -8,47%   -2,62%   -1,06%   MSCI Emerging Markets Small Cap   20,06%   -15,50%   -2,60%   1,27%   MSCI Emerging Markets Growth   43,57%   10,82%   12,24%   11,96%   MSCI Acw   12,22%   12,22%   12,22%   1,22%	MSCI EAFE Net Div	14.88%	-5.13%	0.81%	2.05%
Wasatch Emerging Markets - Small Cap   37.24%   -8.47%   -2.62%   -1.06%	AllianceBerstein EM Strategic Core	15.13%	-3.48%	-0.59%	N/A
Domestic Equity Managers   Small/Mid Capitalization Equity	MSCI Emerging markets	18.18%	-3.05%	2.27%	3.24%
Domestic Equity Managers   Small/Mid Capitalization Equity   Boston Partners - Value   23.33%   -16.69%   -4.02%   1.27%   1.28%   13.00 Value   20.60%   -15.50%   -2.60%   1.85%   10.82%   11.96%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   6.86%   80.58%   3.48%   7.86%   80.69%	Wasatch Emerging Markets - Small Cap	33.24%	18.28%	9.27%	6.02%
Small/Mid Capitalization Equity   Boston Partners - Value   23.33%	MSCI Emerging Markets Small Cap	27.24%	-8.47%	-2.62%	-1.06%
Small/Mid Capitalization Equity   Boston Partners - Value   23.33%					
Boston Partners - Value 23.33% -16.69% -4.02% 1.27% Russell 2500 Value 20.60% -15.50% -2.60% 1.85% Silvercrest- Growth 43.57% 10.82% 12.24% 11.96% Russell 2000 Growth 30.58% 3.48% 7.86% 6.86%					
Russell 2500 Value		22.220/	46.600/	4.000/	4.070/
Silvercrest-Growth					
Russell 2000 Growth   30.58%   3.48%   7.86%   6.86%					
Large Capitalization Equity   Northern Trust Russell 1000 index Fund   21.82%   7.47%   10.64%   10.48%   10.47%   10.64%   10.64%   10.					
Northern Trust Russell 1000 Index Fund   21.82%   7.47%   10.64%   10.48%   Russell 1000   21.82%   7.48%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   1	Russell 2000 Growth	30.58%	3.48%	7.80%	0.80%
Northern Trust Russell 1000 Index Fund   21.82%   7.47%   10.64%   10.48%   Russell 1000   21.82%   7.48%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   10.47%   10.64%   1	Large Capitalization Equity				
Russell 1000   21.82%   7.48%   10.64%   10.47%		21.82%	7.47%	10.64%	10.48%
Long/Short Equity   Grosvenor   7,20%   3,41%   4,94%   3,96%   K2 Mauna Kea   14,96%   N/A   N/A   N/A   N/A   MSCI ACWI   19,39%   2,64%   6,70%   7,03%   1,91%   1,35%   1,135%					
Grosvenor			77.72/2		
MSCI ACWI       19.39%       2.64%       6.70%       7.03%         HFRI FOF Strategic       10.55%       0.07%       1.91%       1.35%         Private Equity       -6.11%       1.19%       9.17%       7.79%         Global Fixed Income Managers         Agincourt- Core Bonds       4.54%       9.88%       6.05%       4.94%         Oaktree Capital Management       10.93%       -4.21%       1.00%       3.04%         BloomBar US Aggregate       2.90%       8.74%       5.32%       4.30%         Loomis Sayles       6.93%       5.18%       4.57%       4.57%         FSTE World Gov't Bond       2.04%       4.60%       3.98%       3.70%         Private Credit       0.69%       6.86%       8.22%       N/A         Low Volatility Strategies Managers       4.02%       -2.70%       0.42%       0.14%         HFRI FOF Conservative       3.86%       -2.10%       1.35%       1.13%         Wellington Global Total Return       0.75%       2.20%       4.69%       N/A         US T-Bills 90 Day + 4.0%       1.01%       5.69%       5.83%       5.24%         Real Assets         MILM Macro - Peak Partners L.P. (Commodities)       1.19		7.20%	3.41%	4.94%	3.96%
MSCI ACWI       19.39%       2.64%       6.70%       7.03%         HFRI FOF Strategic       10.55%       0.07%       1.91%       1.35%         Private Equity       -6.11%       1.19%       9.17%       7.79%         Global Fixed Income Managers         Agincourt- Core Bonds       4.54%       9.88%       6.05%       4.94%         Oaktree Capital Management       10.93%       -4.21%       1.00%       3.04%         BloomBar US Aggregate       2.90%       8.74%       5.32%       4.30%         Loomis Sayles       6.93%       5.18%       4.57%       4.57%         FSTE World Gov't Bond       2.04%       4.60%       3.95%       3.70%         Private Credit       0.69%       6.86%       8.22%       N/A         Low Volatility Strategies Managers       4.02%       -2.70%       0.42%       0.14%         HFRI FOF Conservative       3.86%       -2.10%       1.35%       1.13%         Wellington Global Total Return       0.75%       2.20%       4.69%       N/A         US T-Bills 90 Day + 4.0%       1.01%       5.69%       5.83%       5.24%         Real Assets         MILM Macro - Peak Partners L.P. (Commodities)       1.19	K2 Mauna Kea	14.96%	N/A	N/A	N/A
Private Equity   -6.11%   1.19%   9.17%   7.79%	MSCI ACWI	19.39%	2.64%	-	7.03%
Agincourt- Core Bonds	HFRI FOF Strategic	10.55%	0.07%	1.91%	1.35%
Agincourt- Core Bonds					
Agincourt- Core Bonds Oaktree Capital Management 10.93% -4.21% 1.00% 3.04% BloomBar US Aggregate 2.90% 8.74% 5.32% 4.30% Loomis Sayles 6.93% 5.18% 4.57% 4.57% FSTE World Gov't Bond 2.04% 4.60% 3.98% 3.70% Private Credit 0.69% 6.86% 8.22% N/A  Low Volatility Strategies Managers PAAMCO - Newport Mesa 4.02% -2.70% 0.42% 0.14% HFRI FOF Conservative 3.86% -2.10% 1.35% 1.13% Wellington Global Total Return 0.75% 2.20% 4.69% N/A US T-Bills 90 Day + 4.0% 1.01% 5.69% 5.83% 5.24%  Real Assets MILM Macro - Peak Partners L.P. (Commodities) Bloomberg Commodity 5.08% -17.38% -6.14% -7.69% Private Real Estate (Opportunistic) -3.38% 4.79% 8.32% 9.73% Columbus Square (Opportunistic-Plan owned) 0.95% 3.05% 5.20% 7.64% Blackstone Property Partners (Core RE) -3.99% 1.67% 7.12% 11.10% JP Morgan (Core RE) -2.02% 2.23% 5.14% 6.86% NFI ODEE(net)  Cash and Cash Equivalents OK Invest 0.57% 2.39% 2.21% 2.11% Cash at BNY Mellon ^ 0.18% 1.34% 1.67% 2.27% Total Portfolio Net of Fees 8.95% 1.93% 4.80% 4.92%	Private Equity	-6.11%	1.19%	9.17%	7.79%
Agincourt- Core Bonds Oaktree Capital Management 10.93% -4.21% 1.00% 3.04% BloomBar US Aggregate 2.90% 8.74% 5.32% 4.30% Loomis Sayles 6.93% 5.18% 4.57% 4.57% FSTE World Gov't Bond 2.04% 4.60% 3.98% 3.70% Private Credit 0.69% 6.86% 8.22% N/A  Low Volatility Strategies Managers PAAMCO - Newport Mesa 4.02% -2.70% 0.42% 0.14% HFRI FOF Conservative 3.86% -2.10% 1.35% 1.13% Wellington Global Total Return 0.75% 2.20% 4.69% N/A US T-Bills 90 Day + 4.0% 1.01% 5.69% 5.83% 5.24%  Real Assets MILM Macro - Peak Partners L.P. (Commodities) Bloomberg Commodity 5.08% -17.38% -6.14% -7.69% Private Real Estate (Opportunistic) -3.38% 4.79% 8.32% 9.73% Columbus Square (Opportunistic-Plan owned) 0.95% 3.05% 5.20% 7.64% Blackstone Property Partners (Core RE) -3.99% 1.67% 7.12% 11.10% JP Morgan (Core RE) -2.02% 2.23% 5.14% 6.86% NFI ODEE(net)  Cash and Cash Equivalents OK Invest 0.57% 2.39% 2.21% 2.11% Cash at BNY Mellon ^ 0.18% 1.34% 1.67% 2.27% Total Portfolio Net of Fees 8.95% 1.93% 4.80% 4.92%					
Oaktree Capital Management         10.93%         -4.21%         1.00%         3.04%           BloomBar US Aggregate         2.90%         8.74%         5.32%         4.30%           Loomis Sayles         6.93%         5.18%         4.57%         4.57%           FSTE World Gov't Bond         2.04%         4.60%         3.98%         3.70%           Private Credit         0.69%         6.86%         8.22%         N/A           Low Volatility Strategies Managers         Value         0.69%         6.86%         8.22%         N/A           Low Volatility Strategies Managers         Value         0.69%         6.86%         8.22%         N/A           Low Volatility Strategies Managers         Value         0.69%         6.86%         8.22%         N/A           Low Volatility Strategies Managers         Value         0.69%         6.86%         8.22%         N/A           Low Volatility Strategies Managers         3.86%         -2.10%         1.35%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%         1.13%	Global Fixed Income Managers				
BloomBar US Aggregate	9	4.54%	9.88%		
Loomis Sayles   6.93%   5.18%   4.57%   4.57%	Oaktree Capital Management		-4.21%		
## STE World Gov't Bond Private Credit					
Private Credit   0.69%   6.86%   8.22%   N/A	·				
Low Volatility Strategies Managers					
PAAMCO - Newport Mesa       4.02%       -2.70%       0.42%       0.14%         HFRI FOF Conservative       3.86%       -2.10%       1.35%       1.13%         Wellington Global Total Return       0.75%       2.20%       4.69%       N/A         US T-Bills 90 Day + 4.0%       1.01%       5.69%       5.83%       5.24%         Real Assets         MLM Macro - Peak Partners L.P. (Commodities)       1.19%       -13.92%       -7.33%       -4.76%         Bloomberg Commodity       5.08%       -17.38%       -6.14%       -7.69%         Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents         OK Invest       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%	Private Credit	0.69%	6.86%	8.22%	N/A
PAAMCO - Newport Mesa       4.02%       -2.70%       0.42%       0.14%         HFRI FOF Conservative       3.86%       -2.10%       1.35%       1.13%         Wellington Global Total Return       0.75%       2.20%       4.69%       N/A         US T-Bills 90 Day + 4.0%       1.01%       5.69%       5.83%       5.24%         Real Assets         MLM Macro - Peak Partners L.P. (Commodities)       1.19%       -13.92%       -7.33%       -4.76%         Bloomberg Commodity       5.08%       -17.38%       -6.14%       -7.69%         Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents         OK Invest       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%	Low Volatility Strategies Managers				
HFRI FOF Conservative       3.86%       -2.10%       1.35%       1.13%         Wellington Global Total Return       0.75%       2.20%       4.69%       N/A         US T-Bills 90 Day + 4.0%       1.01%       5.69%       5.83%       5.24%         Real Assets         MLM Macro - Peak Partners L.P. (Commodities)       1.19%       -13.92%       -7.33%       -4.76%         Bloomberg Commodity       5.08%       -17.38%       -6.14%       -7.69%         Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents         OK Invest Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio         Total Portfolio Net of Fees       8.95%		4.02%	-2 70%	0.42%	0 1/1%
Wellington Global Total Return       0.75%       2.20%       4.69%       N/A         US T-Bills 90 Day + 4.0%       1.01%       5.69%       5.83%       5.24%         Real Assets         MLM Macro - Peak Partners L.P. (Commodities)       1.19%       -13.92%       -7.33%       -4.76%         Bloomberg Commodity       5.08%       -17.38%       -6.14%       -7.69%         Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents         OK Invest       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio         Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%	·				
Note					_
Real Assets         MLM Macro - Peak Partners L.P. (Commodities)       1.19%       -13.92%       -7.33%       -4.76%         Bloomberg Commodity       5.08%       -17.38%       -6.14%       -7.69%         Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio       8.95%       1.93%       4.80%       4.92%					-
MLM Macro - Peak Partners L.P. (Commodities)       1.19%       -13.92%       -7.33%       -4.76%         Bloomberg Commodity       5.08%       -17.38%       -6.14%       -7.69%         Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents         OK Invest Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio         Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%	03 / Biii 30 Bay / 1.070	1.01/0	3.0370	3.03/0	3.2470
MLM Macro - Peak Partners L.P. (Commodities)       1.19%       -13.92%       -7.33%       -4.76%         Bloomberg Commodity       5.08%       -17.38%       -6.14%       -7.69%         Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents         OK Invest Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio         Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%	Real Assets				
Solution   Solution		1.19%	-13.92%	-7.33%	-4.76%
Private Real Estate (Opportunistic)       -3.38%       4.79%       8.32%       9.73%         Columbus Square (Opportunistic-Plan owned)       0.95%       3.05%       5.20%       7.64%         Blackstone Property Partners (Core RE)       -3.99%       1.67%       7.12%       11.10%         JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio       8.95%       1.93%       4.80%       4.92%					
Blackstone Property Partners (Core RE)   -3.99%   1.67%   7.12%   11.10%     JP Morgan (Core RE)   -2.02%   2.23%   5.14%   6.86%     NFI ODCE(net)   0.00%   3.13%   5.34%   6.72%     Cash and Cash Equivalents   0.57%   2.39%   2.21%   2.11%     Cash at BNY Mellon ^ 0.18%   1.34%   1.67%   2.27%     Total Portfolio   Total Portfolio Net of Fees   8.95%   1.93%   4.80%   4.92%		-3.38%			9.73%
JP Morgan (Core RE)       -2.02%       2.23%       5.14%       6.86%         NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents         OK Invest Cash at BNY Mellon ^       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio         Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%	Columbus Square (Opportunistic-Plan owned)	0.95%	3.05%	5.20%	7.64%
NFI ODCE(net)       0.00%       3.13%       5.34%       6.72%         Cash and Cash Equivalents       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio       Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%	Blackstone Property Partners (Core RE)	-3.99%	1.67%	7.12%	11.10%
Cash and Cash Equivalents         OK Invest       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio       Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%		-2.02%	2.23%	5.14%	6.86%
OK Invest       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio         Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%	NFI ODCE(net)	0.00%	3.13%	5.34%	6.72%
OK Invest       0.57%       2.39%       2.21%       2.11%         Cash at BNY Mellon ^       0.18%       1.34%       1.67%       2.27%         Total Portfolio         Total Portfolio Net of Fees       8.95%       1.93%       4.80%       4.92%					
Cash at BNY Mellon ^         0.18%         1.34%         1.67%         2.27%           Total Portfolio         Total Portfolio Net of Fees         8.95%         1.93%         4.80%         4.92%	Cash and Cash Equivalents				
Total Portfolio Total Portfolio Net of Fees 8.95% 1.93% 4.80% 4.92%					
Total Portfolio Net of Fees 8.95% 1.93% 4.80% 4.92%	Cash at BNY Mellon ^	0.18%	1.34%	1.67%	2.27%
	Total Portfolio				
Policy Index (1) 12.41% 4.38% 6.17% 5.99%	Total Portfolio Net of Fees	8.95%	1.93%	4.80%	4.92%
	Policy Index (1)	12.41%	4.38%	6.17%	5.99%

Source: Asset Consulting Group, Report June 30, 2020. All returns based on investment industry standards for return calculations.

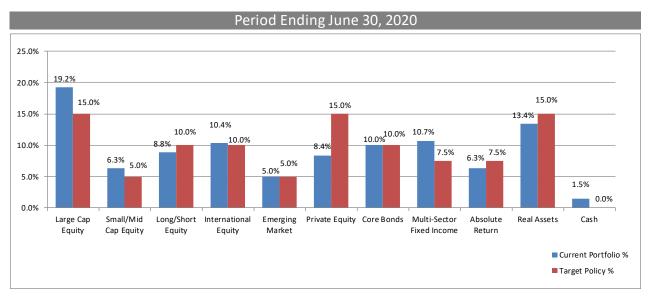
<sup>\* -</sup> Returns are calculated using time-weighted return rates with trade date reporting, daily weighting of cash flows and accruals due.

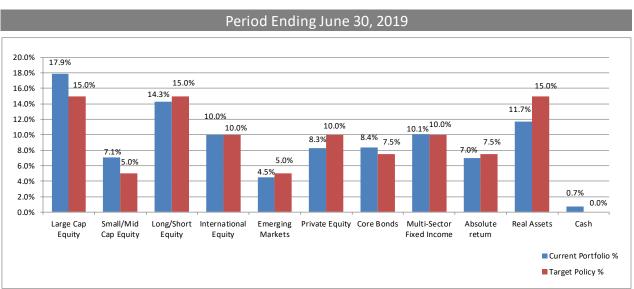
<sup>^ -</sup> Cash with custodian includes miscellaneous equity securities in process of liquidation.

<sup>(1)</sup> The Total Fund Policy Index History (by effective date of change)

<sup>09/2019 -</sup> The policy index consisted of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 15.0% NFI ODCE Net.

## Current Portfolio versus Target Policy Allocation For the Fiscal Years Ended June 30, 2020 and June 30, 2019





## Schedule of Investment Fees For the Fiscal Years Ended June 30, 2020 and 2019

Investment Managers Fees	2020	2019		
Domestic Equity	\$ 2,555,000	\$ 3,009,000		
Private Equity	5,355,000	3,450,000		
International Equity	2,374,000	2,010,000		
Real Estate	3,407,000	2,880,000		
Commodities	339,000	664,000		
Fixed Income-Low Volatility	989,000	1,773,000		
Fixed Income	1,279,000	1,244,000		
Subtotal - Investment Managers Fees	16,298,000	15,030,000		
Custodian fee	199,000	193,000		
Investment Consultant fee	650,000	650,000		
Total Investment Management Fees	\$ 17,147,000	\$ 15,873,000		

# **Schedule of Broker Commissions**For the Fiscal Year Ended June 30, 2020

Schedule of Broker Commissions							
Broker Name\Location	Base Commission	Base amount Traded	Units Traded	Commission per Share			
B RILEY AND CO LLC, NEW YORK	675	327,991	21,033	0.03211			
BAIRD, ROBERT W & CO INC, MILWAUKEE	1,412	1,135,303	41,198	0.03428			
BARCLAYS CAPITAL INC./LE, NEW JERSEY	3,600	2,169,561	126,246	0.02851			
BERNSTEIN SANFORD C & CO, NEW YORK	1,746	2,039,247	82,960	0.02104			
BMO CAPITAL MARKETS CORP, NEW YORK	382	114,136	19,096	0.02000			
BNY CAPITAL MARKETS INC, NEW YORK	61,819	31,425,222	1,758,954	0.03515			
BTIG LLC, NEW YORK	2,901	502,124	111,226	0.02608			
BTIG LLC, SAN FRANCISCO	117	20,299	5,853	0.02000			
BUCKINGHAM RESEARCH, NEW YORK	806	277,094	26,859	0.03000			
CANTOR CLEARING SERV, NEW YORK	90	43,971	4,477	0.02000			
CANTOR FITZGERALD & CO INC, NEW YORK	1,816	503,645	128,734	0.01411			
CITIGROUP GLOBAL MARKETS, INC., NEW YORK	3,579	12,316,968	459,027	0.00780			
CJS SECURITIES INC, JERSEY CITY	2,696	2,194,216	89,851	0.03000			
CONVERGEX EXECUTION SOLUTION, NEW YORK	5,581	4,917,727	242,092	0.02305			
CORNERSTONE MACRO LLC, NEW YORK	3,333	1,643,846	125,638	0.02653			
COWEN AND CO LLC, NEW YORK	34,399	45,624,580	1,478,888	0.02326			
COWEN AND COMPANY, LLC, JERSEY CITY	13,236	7,597,832	441,214	0.03000			
CRAIG HALLUM, NEW YORK	1,118	379,855	27,939	0.04000			
CREDIT SUISSE, NEW YORK (CSUS)	9,610	3,825,639	307,925	0.03121			
DAVIDSON(D A) & CO INC, NEW YORK	1,318	1,436,186	43,407	0.03036			
DOUGHERTY & COMPANY LLC, MINNEAPOLIS	1,586	397,703	43,479	0.03648			
GOLDMAN SACHS & CO, NY	6,896	13,942,217	622,491	0.01108			
GUGGENHEIM CAPITAL MARKETS LLC, NEW YORK	2,155	1,488,817	53,865	0.04000			
ICBC FINCL SVCS, NEW YORK	347	603,912	11,581	0.03000			
INSTINET CLEARING SER INC, NEW YORK	236	183,644	7,868	0.03000			
INSTINET CORP, NEW YORK	59	203,281	5,918	0.01000			
ITG INC, NEW YORK	706	953,188	41,550	0.01700			
J.P. MORGAN SECURITIES LLC, NEW YORK	16,139	7,207,281	595,136	0.02712			
JEFFERIES & CO INC, NEW YORK	24,762	16,757,192	887,294	0.02791			
JMP SECURITIES, SAN FRANCISCO	4,075	1,944,046	160,803	0.02534			
JONESTRADING INST SVCS LLC, NEW YORK	5,019	1,520,863	167,585	0.02995			
KEEFE BRUYETTE + WOODS INC, NEW YORK	2,431	1,451,300	93,724	0.02594			
KEYBANC CAPITAL MARKETS INC, NEW YORK	1,994	732,202	78,900	0.02527			
LEERINK SWANN AND COMPANY, NEW YORK	3,312	1,699,857	101,072	0.03277			
LIQUIDNET INC, NEW YORK	2,787	1,801,199	95,392	0.02921			
LOOP CAPITAL MARKETS, JERSEY CITY	461	128,283	20,833	0.02215			
MACQUARIE SECS USA INC, NEW YORK	126	57,964	3,139	0.04000			
TOTAL - THIS PAGE (PER SHARE IS AVERAGE)	\$223,326	\$169,568,392	8,533,247	0.02617			

Continued on the following page

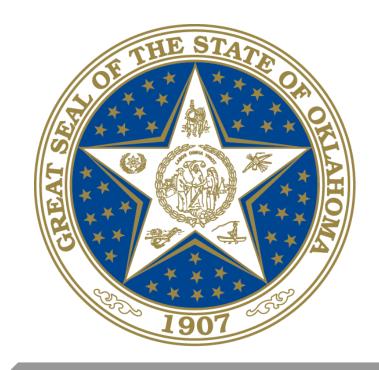
## Schedule of Broker Commissions (continued from previous page) For the Fiscal Year Ended June 30, 2020

Schedule of Broker Commissions							
Broker Name\Location	Base Commission	Base amount Traded	Units Traded	Commission per Share			
MERRILL LYNCH PIERCE FENNER SMITH INC NY	9,943	7,832,227	373,848	0.02660			
MORGAN STANLEY & CO INC, NY	8,448	7,272,417	382,074	0.02211			
NATIONAL FINL SVCS CORP, NEW YORK	6,194	5,006,316	255,521	0.02424			
NEEDHAM AND CO LLC, NEW YORK	1,341	805,501	45,884	0.02922			
NORTHLAND SECURITIES INC., NEW YORK	855	321,197	34,949	0.02446			
OPPENHEIMER & CO INC, NEW YORK	778	903,900	27,274	0.02853			
PERSHING LLC, JERSEY CITY	3,558	3,062,559	109,694	0.03243			
PIPER JAFFRAY & CO., JERSEY CITY	4,102	2,743,592	102,540	0.04000			
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	7,847	5,999,127	221,393	0.03544			
RBC CAPITAL MARKETS LLC, NEW YORK	1,547	1,622,820	44,119	0.03505			
ROTH CAPITAL PARTNERS LLC, NEW YORK	120	89,927	2,994	0.04000			
SANDLER ONEILL AND PARTNER LP, NEW YORK	283	70,159	7,081	0.04000			
SEAPORT GROUP SECURITIES, LLC, NEW YORK	289	211,267	11,833	0.02440			
SIDOTI AND COMPANY LLC, NEW YORK	471	497,369	12,291	0.03832			
STEPHENS INC, LITTLE ROCK	939	453,961	41,325	0.02272			
STIFEL NICOLAUS	1,756	1,056,056	70,993	0.02473			
STRATEGAS SECURITIES LLC, NEW YORK	3,451	1,604,101	115,027	0.03000			
SUNTRUST CAPITAL MARKETS INC, NEW YORK	4,452	3,005,798	126,766	0.03512			
THE BENCHMARK CO LLC, NEW YORK	681	243,559	22,238	0.03063			
UBS SECURITIES LLC, STAMFORD	4,590	4,924,680	180,241	0.02547			
WEDBUSH MORGAN SECS INC, LOS ANGELES	1,574	983,685	46,346	0.03396			
WELLS FARGO SECURITIES LLC, CHARLOTTE	98	314,475	4,920	0.02000			
WELLS FARGO SECURITIES, LLC, NEW YORK	3,341	1,620,066	93,018	0.03592			
WILLIAM BLAIR & CO, CHICAGO	9,700	4,779,248	362,017	0.02679			
TOTAL - THIS PAGE (PER SHARE IS AVERAGE)	\$76,356	\$55,424,008	2,694,386	0.02834			
GRAND TOTAL (PER SHARE IS AVERAGE)	\$299,682	\$224,992,400	11,227,633	0.02669			



## **Actuarial Section**

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- 101 Summary of Actuarial Valuation Results
- 102 Schedule of Active Member Data
- 102 Schedule of Retirants Added\Removed from Rolls
- 102 Schedule of Funding Progress (Actuarial)
- 103 Solvency Test
- 104 Analysis of Financial Experience
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- 110 Summary of System Provisions



**Actuarial Section** 



Cavanaugh Macdonald 3802 Raynor Parkway, Suite 202 Bellevue, NE 68123

Phone (402) 905-4462 Fax (402) 905-4464 www.CavMacConsulting.com

November 3, 2020

Board of Trustees Oklahoma Police Pension and Retirement System 1001 NW 63rd Street, Suite 305 Oklahoma City, OK 73116-7335

#### Members of the Board:

We have completed an actuarial valuation of the Oklahoma Police Pension and Retirement System as of July 1, 2020 for the purpose of determining the actuarial contribution rate and calculating and analyzing key financial measurements. Actuarial valuations are performed annually. This valuation reflects the benefit provisions and contribution rates in effect as of July 1, 2020.

In preparing the valuation, we, as the actuary, relied on the data provided by the System. As part of our work, we performed a limited review of the data for consistency and reasonableness and did not find material defects in the data.

All of the information and supporting schedules in the Actuarial Section have been provided by Cavanaugh Macdonald Consulting, LLC, including:

- Summary of Actuarial Results
- Schedule of Active Member Valuation Data
- Schedule of Retirants and Beneficiaries Added to and Removed from the Annuity Roles
- Schedule of Funding Progress
- Solvency Test
- Analysis of Financial Experience

We also prepared the following exhibits shown in the financial section of the Comprehensive Annual Financial Report:

- Schedule of Funding Progress
- Schedule of Employer Contributions

All historical information that references a valuation date prior to July 1, 2016 was prepared by the prior actuarial firm.

The assumptions recommended by us and adopted by the Board are, in the aggregate, reasonably related to the experience under the System and to reasonable expectations of anticipated experience under the System and meet the parameters for the disclosures under statements issued by the Governmental Accounting Board.

Future actuarial results may differ significantly from the current results presented in this report due to such factors 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. Since 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.

This is to certify that the independent consulting actuaries, Brent Banister and Aaron Chochon, are Members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinion contained herein. They have experience in performing valuations for public retirement systems. The valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board. In particular, the actuarial assumptions and methods used for determining the funding requirements were developed under the applicable Actuarial Standards of Practice. 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.

Respectfully submitted,

Brent a Bante

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

**Chief Actuary** 

Aaron Chochon, ASA, EA, FCA, MAAA

Clare Clack

**Associate Actuary** 

## Oklahoma Police Pension & Retirement System Actuarial Section

The Oklahoma Police Pension and Retirement System is funded on a statutory basis, with contribution rates for employee, employer and the non-employer contributing entity established by statute. The Board, in conjunction with advice from the actuary, reviews the adequacy and appropriateness of the funding policy on a long-term basis. The System's actuary annually calculates an actuarially determined contribution (ADC) to assist with this determination. The actuarial section presents data primarily from a funding perspective, which can differ from the results determined for financial reporting purposes in the financial section. The actuarial assumptions used to calculate both the funding perspective and the financial perspective are materially the same. Exhibit III in the Required Supplementary Information portion of the Financial Section presents the ADC required and the contribution effort made toward the ADC by employers and the State of Oklahoma, a non-employer contributing entity.

## **Summary of Actuarial Valuation Results** As of July 1, 2020

		Actuarial V	aluatior	n as of		
		July 1, 2020		July 1, 2019	% Change	_
Summary of Costs						
Required State Contributions for Current Year	\$	-	\$	-	-	%
Actual State Contributions Received in Prior Year		40,295,000		39,559,000	1.86	
Front de d'Obebre	4		_			
Funded Status	_	2 726 456 000	<u> </u>	2 642 472 000	4.72	04
Actuarial Accrued Liability	\$	2,736,156,000	\$	2,612,473,000	4.73	%
Actuarial Value of Assets		2,756,877,000		2,677,255,000	2.97	
Unfunded Actuarial Accrued Liability		(20,721,000)		(64,782,000)	(68.01)	
Funded Ratio		100.8%		102.5%	(1.68)	
Market Value of Assets and Additional Liabilities						
Market Value of Assets	\$	2,621,311,000	\$	2,618,857,000	0.09	%
Actuarial Present Value of Accumulated System Benefits (ASC 960)		2,537,542,000		2,424,526,000	4.66	
Present Value of Projected System Future Benefits		3,381,260,000		3,230,305,000	4.67	
Summary of Data						
Number of Members in Valuation						
Active Paid Members (vested and not vested) (a)		4,990		4,902	1.80	%
Deferred Option Plan Members		2		4,302	(50.00)	-
Terminated Members with Refunds Due		899		825	(50.00)	
Terminated Members with Deferred Benefits		161		158	1.90	
Retired Members		2,954		2,887	2.32	
Beneficiaries		828		790	4.81	
Disabled Members		130		138	(5.80)	
Total		9,964		9,704	2.68	
	$\perp$	ŕ		,		
Active Member Statistics						
Total Projected Annual Compensation (b)	\$	351,343,791	\$	339,195,248	3.58	%
Average Projected Compensation (b/a)	\$	70,410	\$	69,195	1.76	
Average Age		39.7		39.9	(0.50)	
Average Service		11.7		11.9	(1.68)	

## **Schedule of Active Member Valuation Data**

Valuation Date July 1,	Number of Members	Projected Annual Payroll	Projected Average Annual Payroll	Percentage Change in Average Payroll
2011	4,368	253,989,944	58,148	0.30%
2012	4,441	263,529,629	59,340	2.05%
2013	4,467	276,920,177	61,992	4.47%
2014	4,557	287,105,267	63,003	1.63%
2015	4,570	293,483,501	64,220	1.93%
2016	4,679	312,751,104	66,841	4.08%
2017	4,695	313,087,696	66,685	-0.23%
2018	4,791	323,111,811	67,441	1.13%
2019	4,902	339,195,248	69,195	2.60%
2020	4,990	351,343,791	70,410	1.76%

## Schedule of Retirants/Beneficiaries Added to/Removed from Rolls

	Added to Rolls		Removed from Rolls		Rolls at	Rolls at Year End		
Fiscal Year Ended June 30,	Number of Additions	Annual Benefits	Number of Removals	Annual Benefits	Year End Roll Count	Annual Benefits	Percentage Increase	Average Annual Benefits
2011	127	2,261,138	60	1,652,074	3,060	87,683,881	0.7%	28,655
2012	139	4,587,513	51	1,073,612	3,148	91,197,782	4.0%	28,970
2013	151	4,773,719	60	694,596	3,239	95,276,905	4.5%	29,416
2014	123	3,873,758	42	1,303,391	3,320	97,847,272	2.7%	29,472
2015	175	6,613,773	47	947,483	3,448	103,513,562	5.8%	30,021
2016	175	6,489,659	73	2,024,379	3,550	107,978,842	4.3%	30,417
2017	181	6,601,023	73	2,234,813	3,658	112,345,052	4.0%	30,712
2018	177	6,561,513	115	3,252,707	3,720	115,653,858	2.9%	31,090
2019	184	7,351,430	89	2,766,637	3,815	120,238,651	4.0%	31,517
2020	213	8,778,156	116	3,416,592	3,912	129,851,595	8.0%	33,193

## **Schedule of Funding Progress (Actuarial Basis)**

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Accrued Liability (AAL) Entry Age (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
7/1/2011	1,822,702,000	1,959,976,006	137,274,006	93.0%	257,504,567	53.3%
7/1/2012	1,834,170,000	2,034,485,171	200,315,171	90.2%	266,038,359	75.3%
7/1/2013	1,902,581,000	2,131,172,172	228,591,172	89.3%	279,013,522	81.9%
7/1/2014	2,086,297,000	2,204,797,154	118,500,154	94.6%	289,502,327	40.9%
7/1/2015	2,229,272,000	2,269,073,426	39,801,426	98.2%	295,307,065	13.5%
7/1/2016	2,323,407,000	2,354,815,000	31,408,000	98.7%	296,407,692	10.6%
7/1/2017	2,447,351,000	2,403,073,000	(44,278,000)	101.8%	299,131,000	-14.8%
7/1/2018	2,586,061,000	2,515,811,000	(70,250,000)	102.8%	308,731,000	-22.8%
7/1/2019	2,677,255,000	2,612,473,000	(64,782,000)	102.5%	324,262,000	-20.0%
7/1/2020	2,756,877,000	2,736,156,000	(20,721,000)	100.8%	340,200,000	-6.1%

## **Solvency Test**

The OPPRS 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 OPPRS 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 OPPRS 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 OPPRS.

Valuation Year July 1,	Aggregate  Active Member  Contributions  (Liability 1)	Accrued Liability and Retirees, Beneficiaries and Terminated Vested Members (Liability 2)	Valuation Assets (in t Employer Financed Portion of Active Members (Liability 3)	thousands)  Total  Liability  (1+2+3)	Reported Assets * (in thosands)		of Accrued Lia vered by Asse (2)		Funded Ratio of Total Accrued Actuarial Liability
2011	184,781	944,082	831,113	1,959,976	1,822,702	100%	100%	83.5%	93.0%
2012	189,460	983,507	861,518	2,034,485	1,834,170	100%	100%	76.7%	90.2%
2013	199,233	1,037,457	894,482	2,131,172	1,902,581	100%	100%	74.4%	89.3%
2014	209,577	1,057,854	937,367	2,204,798	2,086,297	100%	100%	87.4%	94.6%
2015	214,686	1,112,856	941,532	2,269,074	2,229,272	100%	100%	95.8%	98.2%
2016	223,255	1,176,401	955,159	2,354,815	2,323,407	100%	100%	96.7%	98.7%
2017	238,151	1,193,676	971,246	2,403,073	2,447,351	100%	100%	104.6%	101.8%
2018	245,909	1,225,406	1,044,496	2,515,811	2,586,061	100%	100%	106.7%	102.8%
2019	251,559	1,266,287	1,094,627	2,612,473	2,677,255	100%	100%	105.9%	102.5%
2020	258,774	1,358,154	1,119,228	2,736,156	2,756,877	100%	100%	101.9%	100.8%

<sup>\* -</sup> Actuarial Value of assets based on the smoothing technique adopted by the Board.

# **Analysis of Financial Experience** As of July 1, 2020

1. E	Expected Actuarial Accrued Liability	
a	a. Actuarial Accrued Liability at July 1, 2019	\$ 2,612,473,000
k	o. Normal Cost and Expenses for Plan Year Ended June 30, 2020	63,478,000
c	c. Benefit Payments for Plan Year Ending June 30, 2020	(163,193,000)
C	d. Change in Actuary	-
$\epsilon$	e. Interest on (a), (b), (c) and (d)	194,687,000
f	Change in Actuarial Accrued Liabilty at July 1, 2020 due to changes in Actuarial Assumptions	-
8	g. Change in Actuarial Accrued Liability at July 1, 2020 due to changes in System Provisions (ad hoc COLA)	 43,716,000
ŀ	n. Expected Actuarial Accrued Liability at July 1, 2020	2,751,161,000
2. <i>A</i>	Actuarial Accrued Liability at July 1, 2020	 2,736,156,000
3. A	Actuarial Liability Gain/(Loss) (1h 2)	15,005,000
4. E	Expected Actuarial Value of Assets	
a	a. Actuarial Value of Assets at July 1, 2019	2,677,255,000
t	c. Contributions Made for Plan Year Ending June 30, 2020	111,831,000
C	c. Benefit Payments and Expenses for Plan Year Ending June 30, 2020	(165,185,000)
C	d. Interest on (a + b - c) to End of Year	 198,830,000
$\epsilon$	e. Expected Actuarial Value of Assets at July 1, 2020	2,822,731,000
5. <i>A</i>	Actuarial Value of Assets at July 1, 2020	2,756,877,000
6. <i>A</i>	Actuarial Asset Gain/(Loss) (5 - 4e.)	(65,854,000)
7. <i>A</i>	Actuarial Gain/(Loss) (3 + 6)	(50,849,000)

## **Summary of Actuarial Assumptions and Methods**

#### **Actuarial Cost Method**

Liabilities and contributions shown in this report are computed using the Individual Entry Age method of funding. Sometimes called the "funding method," this is a particular technique used by actuaries for establishing the amount of the annual actuarial cost of pension benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the System is comprised of (1) the normal cost; and (2) an amortization payment on the unfunded actuarial accrued liability.

Under the Entry Age Actuarial Cost Method, the Normal Cost is computed as the level percentage of pay which, if paid from the earliest time each member would have been eligible to join the System had it existed (thus entry age) until his retirement or termination, would accumulate with interest at the rate assumed in the valuation to a fund sufficient to pay all benefits under the System.

The Actuarial Accrued Liability under this method, at any point in time, is the theoretical amount of the fund that would have accumulated had annual contributions equal to the normal cost been made in prior years (it does not represent the liability for benefits accrued to the valuation date). The Unfunded Actuarial Accrued Liability is the excess of the actuarial accrued liability over the actuarial value of System assets on the valuation date.

Under this method, experience gains or losses, i.e. decreases or increases in actuarial accrued liabilities attributable to deviations in experience from the actuarial assumptions, adjust the unfunded actuarial accrued liability.

#### **Asset Valuation Method**

The actuarial value of assets is based on a five-year moving average of expected and actual market values determined as follows:

- at the beginning of each fiscal year, a preliminary expected actuarial asset value is calculated as the sum of the previous year's actuarial value increased with a year's interest at the System valuation rate plus net cash flow adjusted for interest (at the same rate) to the end of the previous fiscal year;
- the expected actuarial asset value is set equal to the preliminary expected actuarial value plus the unrecognized investment gains and losses as of the beginning of the previous fiscal year;
- the difference between the expected actuarial asset value and the market value is the investment gain or loss for the previous year;
- the (final) actuarial asset value is the preliminary value plus 20% of the investment gains and losses for each
  of the five previous fiscal years, but in no case more than 120% of the market value or less than 80% of the
  market value.

#### **Amortization Method**

The unfunded actuarial accrued liability is amortized as a level dollar amount over a 5-year open period. Surplus, if any, is amortized as a level dollar amount over a 30-year open period.

#### **Valuation Procedures**

The wages used in the projection of benefits and liabilities are pay for the year ending June 30, 2018 (including longevity bonuses). These amounts were projected into the valuation year using the valuation salary scale.

In computing accrued benefits, average earnings were determined using the valuation salary scale. Historical earnings for the past five years have been retained.

Retired Members were assumed to be married according to the probability of marriage assumption. For those in the Baker group, the assumption is 100% married.

The impact from compensation limit under IRC Section 401(a)(17) and from the dollar limitation required by the Internal Revenue Code Section 415 for governmental plans were considered in this valuation and was determined to be *de minimis*.

The calculations for the required state contribution are determined as of mid-year. Since the agency contributions, member contributions and State insurance premium tax allocations are made on a monthly basis throughout the year, a mid-year determination date represents an average weighting of the contributions.

#### **Economic Assumptions**

1. Inflation

2.75% per annum, compound annually.

2. Investment Return

7.5%, net of investment expenses, per annum, compound annually.

3. Salary Scale

Sample rates are shown below:

Attained Service	Inflation %	Merit %	Increase %
0	3.50	8.50	12.00
1	3.50	6.50	10.00
2	3.50	5.50	9.00
3	3.50	4.50	8.00
4-6	3.50	4.00	7.50
7	3.50	3.75	7.25
8	3.50	3.50	7.00
9	3.50	3.25	6.75
10-12	3.50	3.00	6.50
13	3.50	2.00	5.50
14	3.50	1.25	4.75
15	3.50	0.75	4.25
16-25	3.50	0.25	3.75
26+	3.50	0.00	3.50

#### **Demographic Assumptions**

1. Retirement Rates

Sample rates are shown below:

Attained Service	Annual Rates of Retirement		
20	15%		
21	8		
22	8		
23	8		
24	8		
25	20		
26	10		
27	10		
28	10		
29	15		
30	20		
31	30		
32	40		
33	50		
34	75		
35	100		

2. Mortality Rates

(a) Active participants

RP-2000 Combined Blue Collar Healthy Employees (Fully generational using Scale AA) with age set back four years

(b) Active participants (postretirement) and nondisabled pensioners RP-2000 Combined Blue Collar Healthy Employees (generational using Scale AA)

(c) Disabled pensioners

RP-2000 Combined Blue Collar Healthy Combined with age set forward four years (no generational improvement)

3. Disability Rates

Sample rates are shown below:

Age	Rate
20-24	0.02%
25-29	0.02
30-34	0.04
35-39	0.06
40-44	0.08
45-49	0.10
50-54	0.12
Over 55	0.14

#### 4. Withdrawal Rates

Sample rates are shown below:

Service Range	Rate				
0	15.0%				
1	12.0				
2	10.0				
3	8.0				
4	7.0				
5	6.0				
6	5.0				
7	4.5				
8	4.0				
9	3.5				
10	3.0				
11	2.5				
12	2.0				
13	1.5				
14-20	1.0				
Over 20	0.0				

5. Marital Status

(a) Percentage married: Males: 85%; Females: 85%

(b) Age difference: Males are assumed to be three (3) years older than females.

#### **Other Assumptions:**

1. Deferred Benefits Begin at: Age 50, or the date at which the participant would have

achieved twenty years of service, if later.

2. Provision for Expenses: Administrative Expenses, as budgeted by the Oklahoma Police

Pension and Retirement System.

3. Percentage of Disability Members becoming disabled have a 50%-74% impairment.

4. Duty-Related Death: All pre-retirement deaths are duty-related.

5. Cost-of-Living Allowance: Police officers eligible to receive increased benefits according

to repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order receive an adjustment of 1/3 to 1/2 of the increase or decrease of any adjustment to the base salary of a regular police officer, based on an

increase in base salary of 3.5% (wage inflation).

6. Deferred Option Plan Members currently participating in the Deferred Option plan

(DOP) are assumed to remain in the DOP for the maximum of five years. Active members leaving active service are assumed to retroactively elect to join the DOP for the maximum allowable period. DOP account balances are assumed to accumulate at 11.00% (to reflect the interest rate guarantee prior to retirement) for future Back DOP elections and members are assumed to elect a lump sum at retirement. All balances held in Deferred Option payout accounts are assumed to be paid immediately upon the end of

employment.

### **Summary of System Provisions**

Effective Date and Plan Year: The System became effective July 1, 1981 and has been amended each

year since then. The plan year is July 1 to July 30.

Administration: The System is administered by the Oklahoma Police Pension Retirement

Board consisting of thirteen Members. The Board shall be responsible for the policies and rules for the general administration of the System.

Plan Type: Defined benefit plan.

**Employers Included:** An eligible employer may join the System on the first day of any month.

An application of affiliation must be filed in the form of a resolution before the eligible municipality can become a participating municipality.

Eligibility: All persons employed full-time as officers working more than 25 hours

per week or any person undergoing police training to become a permanent police officer with a police department of a participating municipality, with ages not less than twenty-one (21) nor more than

forty-five (45) when accepting membership.

Salary Considered: Base salary used in the determination of benefits does not include

payment for accumulated sick and annual leave upon termination of

employment or any uniform allowances.

Final average salary means the average paid base salary for normally scheduled hours of an officer over the highest 30 consecutive months of

the last 60 months of credited service.

Service Considered: Credited service consists of the period during which the Member

participated in the System or predecessor municipal pay as an active employee, plus any service prior to the establishment of the municipal plan which was credited under the predecessor municipal systems of credited service granted by the State Board, plus any applicable military

service.

State Contributions: Insurance premium tax allocation. Historically, the System has received

14% of these collected taxes. For the fiscal years beginning July 1, 2004 and ending June 30, 2009, the System received 17% of these collected taxes. For the fiscal year thereafter, the System received 14% of these collected taxes. Beginning in fiscal year July 1, 2006, the System began receiving 26% of a special allocation established to refund the System for reduced allocations of insurance premium taxes resulting from increases in insurance premium tax credits. Beginning in fiscal year July,

1 2010, the amount of insurance premium tax apportioned to the

System will be applied prior to the calculation of the Home Office Credit.

Member Contributions: 8% percent of paid salary. These contributions shall "be picked up" after

December 31, 1988 pursuant to Section 414(h)(2) of the Internal

Revenue Code.

Municipality Contributions: Contribution is 13% percent of paid salary as of July 1, 1996.

**Normal Retirement Benefit:** 

Normal Retirement Eligibility: 20 years of credited service.

Benefit Amount: 2 1/2% of the final average salary multiplied by the years of credited

service, with a maximum of 30 years of credited service considered.

Normal Form of Benefit: The benefit is paid as a Joint and 100% Survivor Annuity if the Member

was married 30 months prior to death.

**Termination Benefit:** 

Less than 10 Years of Service: Refund of contributions without interest.

More than 10 Years of

Service:

If greater than 10 years of service, but not eligible for the normal retirement benefit, the benefit is payable at the later of the date the Member would have had 20 years of service or the date the member reaches age 50. The benefit amount is equal to 2 1/2% of the greater of (i) final average salary or (ii) the salary paid to active employees as described under "salary considered" multiplied by the number of years and completed months of credited service.

**Disability Benefit (Duty):**Total Disability

Upon determination of disability incurred as a result of the performance of duty, the normal disability benefit is 50% of final average salary.

**Partial Disability** 

Upon determination of partial disability incurred as a result of the performance of duty, the normal disability is reduced according to the percentage of impairment, as outlined in the "American Medical Association's Guide to the Evaluation of Permanent Impairment." The following shows the percent of normal disability benefit payable as related to the percent of impairment.

<u>% Impairment</u>	<u>% of Benefit</u>
1% to 49%	50%
50% to 74%	75%
75% to 100%	100%

#### **Disability Benefit (Non-Duty):**

Upon determination of disability after 10 years of service due to causes other than duty, the benefit equals the accrued benefit of 2 ½% of final average salary times years of credited service (maximum of 30 years) times:

- 100%, if permanent and total, or
- The following percentages, if partial disability.

<u>% Impairment</u>	<u>% of Benefit</u>				
1% to 24%	25%				
25% to 49%	50%				
50% to 74%	75%				
75% to 99%	90%				

Upon determination of disability with less than 10 years of service due to causes other than duty, a refund of member contributions without interest will be paid.

# Death Benefits Payable to Beneficiaries:

Prior to Retirement (Duty):

The greater of:

1) 2 ½% of final average salary times years of credited service (maximum of 30 years), or

2) 50% of final average salary.

Prior to Retirement (Non-Duty):

After 10 years of service, a benefit equal to 2 ½% of final average salary times years of credited service (maximum if 30 years).

Prior to 10 years of service, a refund of the accumulated contributions made by the Member will be paid to the estate.

After Retirement or Vested Termination:

100% of the Member's retirement or deferred vested benefit, payable when the Member would have been eligible to receive it, payable to the beneficiary.

Lump Sum: The beneficiary shall receive a lump-sum amount of \$5,000.

Beneficiary Eligibility: Surviving spouses must be married to the member 30 months prior to the date of death (waived in the case of duty related death).

If the beneficiary is a child, the benefits are payable to age 18, or to age 22 if a full-time student. If the beneficiary is a spouse to whom the Member was married for at least 30 months prior to death, if the death was not duty related, the benefits are payable for life.

#### **Postretirement Adjustments:**

Police officers eligible to receive increased benefits according to repealed Section 50-120 of Title 11 of the Oklahoma Statutes pursuant to a court order receive an adjustment of 1/3 to ½ of the increase or decrease of any adjustment to the base salary of a regular police officer.

#### **Deferred Option Plan:**

A Member with 20 or more years of service may elect to participate in the Deferred Option Plan (DOP). Participation in the DOP shall not exceed five years. The members' contributions cease upon entering the DOP, but the agency contributions are divided equally between the Retirement System and Deferred Option Plan. The monthly retirement benefits that the member is eligible to receive are paid into the Deferred Option Plan account.

Members can elect to retroactively join the DOP as of a back-drop-date which is no earlier than the member's normal retirement date or five years before his termination date. The monthly retirement benefits and employee contributions that would have been payable had the member elected to join the DOP are credited to the member's DOP account with interest.

The retirement benefits are not recalculated for service and salary past the election date to join the Deferred Option Plan. However, the benefits are increased by cost-of-living increases applicable to retired members during the DOP period.

When the Member actually terminates employment, the Deferred Option Plan account balance may be paid in a lump sum or to an annuity provider. Monthly retirement benefits are then paid directly to the retired Member.

This Plan became effective during the July 1, 1991 to June 30, 1992 Plan Year. The Deferred Option Plan account is guaranteed a minimum of the valuation interest rate for investment return, or 2% less than the fund rate of return, if greater.



# Statistical Section

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**Statistical Section** 

# Oklahoma Police Pension and Retirement System Statistical Section

This section provides additional detailed information covering extended time spans to facilitate a better understanding of the System's results presented in the financial statements, notes to the financial statements and required supplementary information. Multi-year presentations of financial and operational results help to assess the economic condition and long-term economic stability of the Oklahoma Police Pension and Retirement System (OPPRS).

#### **Financial Trends**

Financial trend information helps determine whether or not the financial position of the System has improved or declined over time. Trend information also provides a long-term comparison of financial activity to assess the affect decisions and changes have had on the System's financial position. The following schedules present financial trend information:

Schedule of Changes in Fiduciary Net Position Schedule of Revenue by Source Schedule of Benefit Payments and Refunds by Type Schedule of Expenses by Type Funded Ratio (Chart)\*

#### **Revenue Capacity**

Revenue capacity information helps assess the System's performance in generating its own-source revenue. As a pension plan, the System generates revenue primarily through investing available assets with the goal of generating investment income and positive investment returns. The following schedule presents revenue capacity information:

Schedule of Rate of Return by Investment Type\*\*

#### **Operating and Demographic Information**

Operating and demographic information helps to assess changes in the System's membership, resources and operating performance over time. This information provides a better understanding of the employers that participate in the System, the size and types of payments made to participants, and the changes to the size of the System's active and retired membership. The following schedules present operating and demographic information:

Schedule of Retired Members by Type of Benefit Schedule of Principal Participating Employers Membership Statistics Data\* Schedule of Average Benefit Payments\* Schedule of Participating Employers

Unless otherwise noted, information is derived from OPPRS internal sources.

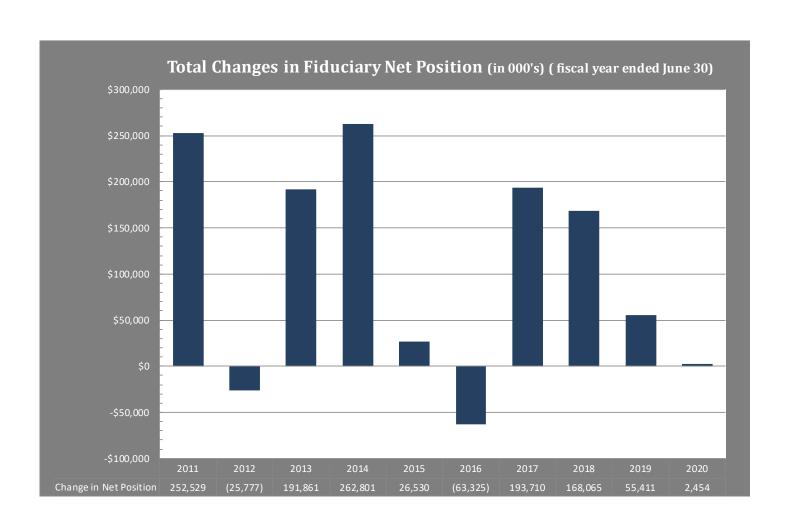
- \* Based on schedules and data provided by actuarial consultant, Cavanaugh Macdonald Consulting, LLC.
- \*\*- Based on data provided by investment consultant, Asset Consulting Group.

### **Schedule of Changes in Fiduciary Net Position (in Thousands)**

	Additions				Deductions				
Fiscal			Insurance	Net		Deferred			<b>Total Changes</b>
Year Ended	Member	Employer	Premium	Investment	Benefit	Option	Refund of	Administrative	in Fiduciary
June 30,	Contributions	Contributions	Tax	Income (Loss)	Payments *	Payments**	Contributions	Expenses	<b>Net Position</b>
2011	19,489	31,846	24,645	282,305	86,843	15,084	2,117	1,712	252,529
2012	20,113	32,896	28,092	8,374	89,691	22,039	1,570	1,952	(25,777)
2013	21,518	34,645	31,412	221,174	93,987	19,018	1,830	2,053	191,861
2014	22,131	35,547	31,329	294,897	97,361	20,121	1,759	1,862	262,801
2015	22,867	37,261	35,490	74,554	100,889	38,769	2,035	1,949	26,530
2016	23,787	38,533	35,915	(21,104)	106,326	30,265	2,034	1,831	(63,325)
2017	23,916	38,887	34,283	242,415	110,496	31,644	1,952	1,699	193,710
2018	24,747	40,135	39,028	205,439	115,061	22,853	1,649	1,721	168,065
2019	26,173	42,154	39,559	104,882	119,964	33,645	1,877	1,871	55,411
2020	27,310	44,226	40,295	55,808	123,375	37,367	2,451	1,992	2,454

Total Cumulative Change in Net Positon for the Last 10 Years \$1,064,259

<sup>\*\* -</sup> Deferred Option Payments include the Deferred Option and back DROP plans.



<sup>\* -</sup> Benefit Payments include survivor and death benefit payments.

### **Schedule of Revenue by Source (in Thousands)**

Fiscal Year Ended June 30,	Member Contributions	Employer Contributions	Insurance Premium Tax*	Net Investment Income (Loss)**	Total Revenue by Source
2011	19,489	31,846	24,645	282,305	358,285
2012	20,113	32,896	28,092	8,374	89,475
2013	21,518	34,645	31,412	221,174	308,749
2014	22,131	35,547	31,329	294,897	383,904
2015	22,867	37,261	35,490	74,554	170,172
2016	23,787	38,533	35,915	(21,104)	77,131
2017	23,916	38,887	34,283	242,415	339,501
2018	24,747	40,135	39,028	205,439	309,349
2019	26,173	42,154	39,559	104,882	212,768
2020	27,310	44,226	40,295	55,808	167,639

<sup>\* -</sup> The Oklahoma Police Pension and Retirement System recieves a portion of the Insurance Premium Tax (14%) that is assessed and collected by the State of Oklahoma.

## **Schedule of Expenses by Type (in Thousands)**

Fiscal Year Ended June 30,	Pension Benefits	Death Benefits	Deferred Option Benefits	Refunds	Administrative Expenses	Total
2011	86,638	205	15,084	2,117	1,712	105,756
2012	89,451	240	22,039	1,570	1,952	115,252
2013	93,672	315	19,018	1,830	2,053	116,888
2014	97,031	330	20,121	1,759	1,862	121,103
2015	100,684	205	38,769	2,035	1,949	143,642
2016	106,055	271	30,265	2,034	1,831	140,456
2017	110,256	240	31,644	1,952	1,699	145,791
2018	114,721	340	22,853	1,649	1,721	141,284
2019	119,664	300	33,645	1,877	1,871	157,357
2020	122,915	460	37,367	2,451	1,992	165,185

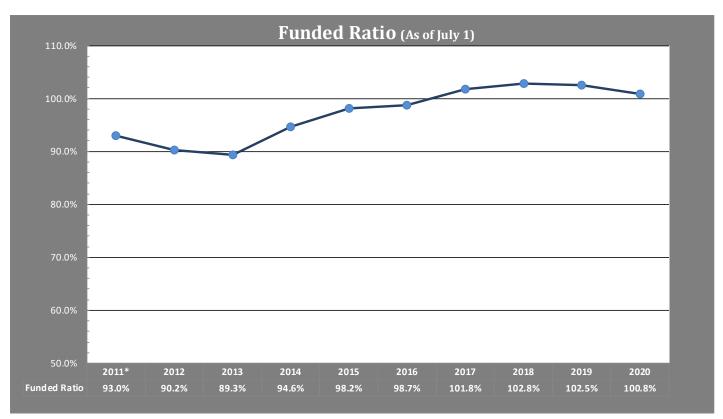
<sup>\*\* -</sup> Investment income includes both realized and unrealized gains and losses on investments, net of investment expenses.

### Schedule of Benefit Payments and Refunds by Type (in Thousands)

Fiscal		Benefit Payme	ents by Type		Deferred Refunds			Total Benefit
Year Ended	Service			Death	Option		Member	Payments and
June 30,	Retirement	Beneficiaries	Disabled	Benefit	Benefits*	Withdrawal	Death	Refunds
2011	68,211	16,071	2,356	205	15,084	1,956	161	104,044
2012	70,411	16,699	2,341	240	22,039	1,552	18	113,300
2013	73,610	17,711	2,351	315	19,018	1,752	78	114,835
2014	76,020	18,635	2,376	330	20,121	1,642	117	119,241
2015	79,384	18,989	2,311	205	38,769	1,733	302	141,693
2016	84,106	19,616	2,333	271	30,265	2,007	27	138,625
2017	87,788	20,036	2,432	240	31,644	1,832	120	144,092
2018	91,154	21,150	2,417	340	22,853	1,643	6	139,563
2019	95,848	21,476	2,340	300	33,645	1,811	66	155,486
2020	97,453	23,145	2,317	460	37,367	2,268	183	163,193

<sup>\* -</sup> Deferred Option Payments may vary considerably from year-to-year based on the number of members electing this benefit.

### Funded Ratio (Actuarial Basis, at July 1)

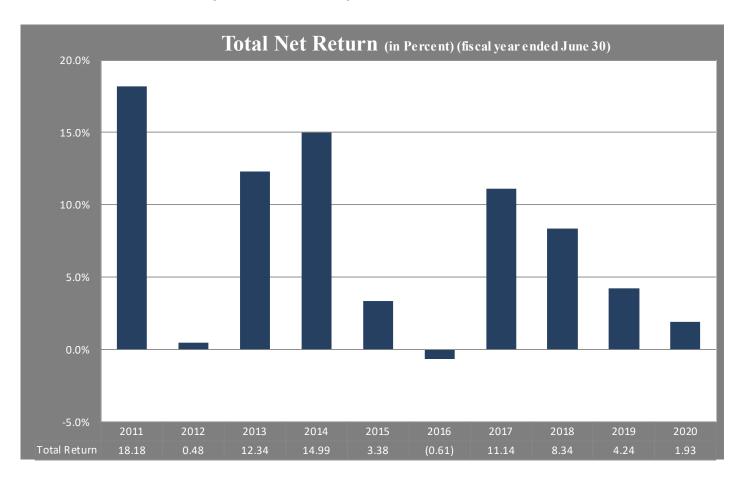


<sup>\* -</sup> Beginning in 2011, funded ratio calculations do not include Cost-of-Living-Adjustments (COLA's) due to legislation requiring all ad-hoc COLA's be prefunded by the Oklahoma Legislature.

### **Schedule of Returns by Investment Type (Net, in Percent)**

Fiscal Year Ended June 30,	U.S. Equity	International Equity	Private Equity	Fixed Income	Real Estate and Commodity	Total Return (net of fees)
2011	21.40	27.64	18.14	9.00	3.61	18.18
2012	(11.95)	10.78	7.18	2.88	7.45	0.48
2013	14.77	24.86	7.93	2.64	15.52	12.34
2014	20.36	18.13	16.03	9.48	10.88	14.99
2015	7.03	(1.84)	15.26	(0.42)	3.53	3.38
2016	(1.60)	(6.77)	5.78	1.00	5.05	(0.61)
2017	17.84	18.48	5.47	3.82	5.52	11.14
2018	13.41	6.68	11.71	2.74	9.10	8.34
2019	5.30	0.44	15.09	5.42	2.28	4.24
2020	4.25	(2.94)	1.19	3.80	0.22	1.93

### **Total Annual Return (Net, in Percent)**



### Schedule of Retired Members by Type of Benefit For the Fiscal Year Ended June 30, 2020

Monthly	Number of		Number of Retirees and Beneficiaries by Type of Retirement*					
Benefit Amount	Retirees and Beneficiaries	1	2	3	4	5	6	7
\$ 0 - 1,000	253	21	58	115	39	6	10	4
1,001 - 1,500	311	45	66	28	32	3	130	7
1,501 - 2,000	503	91	29	12	18	4	332	17
2,001 - 2,500	760	136	19	5	8	0	578	14
2,501 - 3,000	709	105	6	2	7	3	583	3
3,001 - 3,500	567	98	3	0	5	0	455	6
3,501 - 4,000	319	45	0	0	1	1	269	3
4,001 - 4,500	240	51	1	0	2	0	185	1
4,501 - 5,000	109	10	0	0	0	0	99	0
5,001 - 5,500	58	5	0	0	0	0	53	0
5,501 - 6,000	50	3	0	0	0	0	47	0
6,001 - 6,500	13	0	0	0	0	0	13	0
6,501 - 7,000	4	0	0	0	0	0	4	0
7,001 - 7,500	5	1	0	0	0	0	4	0
7,501 - 8,000	2	1	0	0	0	0	1	0
8,001 - 8,500	5	0	0	0	0	0	5	0
8,501 - 9,000	2	0	0	0	0	0	2	0
Totals:	3,910	612	182	162	112	17	2,770	55

#### \* Type of Retirement

- Type 1 CONTINUANCE benefits paid to the beneficiaries of a deceased retired member.
- Type 2 DEFERRED VESTED accrued benefits paid to members for completing at least 10 years of service, but less than 20.
- Type 3 QUALIFIED DOMESTIC RELATIONS ORDER court ordered assignment of member benefits to an alternate payee.
- Type 4 DUTY DISABILITY benefits paid to members disabled in the performance of their duty.
- Type 5 NON-DUTY DISABILITY benefits paid to members disabled outside the line of duty.
- Type 6 SERVICE normal retirement benefits paid to members completing at least 20 years of credited service.
- Type 7 SURVIVORSHIP benefits paid to beneficiaries of deceased active members.

### **Schedule of Average Benefit Payments**

				Yea	rs of Cr	edited Serv	vice*			
Retirement Effective Dates (Note A)		10-15		15-20		20-25		25-30		30+
July 1, 2010 to June 30, 2020										
Period 07/01/10 to 06/30/11										
Average Monthly Benefit	\$	-	\$	1,662	\$	2,760	\$	3,834	\$	4,341
Average Final Average Salary	\$	-	\$	4,023	\$	5,224	\$	5,558	\$	5,787
Number of Retired Members		0		2		65		13		8
Period 07/01/11 to 06/30/12										
Average Monthly Benefit	\$	-	\$	1,614	\$	2,726	\$	3,587	\$	4,090
Average Final Average Salary	\$	-	\$	3,650	\$	5,164	\$	5,134	\$	5,454
Number of Retired Members		0		2		72		23		6
Period 07/01/12 to 06/30/13										
Average Monthly Benefit	\$	_	\$	_	\$	2,721	\$	3,891	\$	4,880
Average Final Average Salary	\$	_	\$	_	\$	5,187	\$	5,674	\$	6,507
Number of Retired Members	Ψ	0	7	0	7	79	Y	16	Υ	11
Number of Retired Wellibers		O		Ü		75		10		11
Period 07/01/13 to 06/30/14										
Average Monthly Benefit	\$	-	\$	-	\$	2,899	\$	3,617	\$	4,483
Average Final Average Salary	\$	-	\$	-	\$	5,410	\$	5,413	\$	5,978
Number of Retired Members		0		0		70		15		4
Period 07/01/14 to 06/30/15										
Average Monthly Benefit	\$	-	\$	-	\$	3,017	\$	4,432	\$	4,848
Average Final Average Salary	\$	-	\$	-	\$	5,652	\$	6,556	\$	6,464
Number of Retired Members		0		0		86		34		11
Period 07/01/15 to 06/30/16										
Average Monthly Benefit	\$	1,034	\$	2,187	\$	2,973	\$	4,081	\$	4,992
Average Final Average Salary	\$	3,255	\$	5,047	\$	5,598	\$	6,113	\$	6,656
Number of Retired Members		5		0		72		21		20
Period 07/01/16 to 06/30/17										
Average Monthly Benefit	\$	855	\$	2,136	\$	3,088	\$	3,808	\$	4,696
Average Final Average Salary	\$	3,323	\$	4,970	\$	5,784	\$	5,521	\$	6,262
Number of Retired Members		2		8		78		21		14
Period 07/01/17 to 06/30/18										
	Ś	1.997	Ś	2.064	Ś	3.274	Ś	4.573	Ś	4.873
Number of Retired Members	,	5	•	3	,	73	•	10	•	16
Period 07/01/18 to 06/30/19										
	\$	1.006	Ś	2.299	Ś	3.227	Ś	4.475	\$	5,095
·								•		
Number of Retired Members	Ψ	1	Ψ	6	Ψ	75	Ψ	21	7	24
Period 07/01/19 to 06/30/20										
	¢	1 102	¢	2 716	¢	3 289	¢	4 747	ς.	5 264
								•		
Number of Retired Members	Y	3,400	7	4	7	65	7	38	7	27
Period 07/01/17 to 06/30/18 Average Monthly Benefit Average Final Average Salary Number of Retired Members  Period 07/01/18 to 06/30/19 Average Monthly Benefit Average Final Average Salary Number of Retired Members  Period 07/01/19 to 06/30/20 Average Monthly Benefit Average Final Average Salary Average Monthly Benefit Average Final Average Salary	\$ \$ \$ \$	1,997 6,034 5 1,006 3,281 1 1,102 3,466	\$ \$ \$ \$	2,064 4,706 3 2,299 5,069 6 2,716 5,882	\$ \$ \$ \$	3,274 6,062 73 3,227 6,043 75 3,289 6,194	\$ \$ \$ \$	4,573 6,519 10 4,475 6,392 21 4,747 7,105	\$ \$ \$ \$	4,873 6,615 16 5,095 6,794 24 5,264 6,856

Note A - Schedule includes service retirements as of July 1, 2020 and does not include disability retirements. For participants in the Deferred Option Plan, the Retirement Effective Date is the date the member left active service and the final average salary is determined as of the date the member effectively entered the Deferred Option Plan.

st - The plan vesting period is 10 years, so no average benefit is earned or paid for service credit of less than 10 years.

### Schedule of Principal Participating Employers Current Year and Nine Years Prior

	Fi	scal Year 20	20	Fiscal Year 2011				
10 Largest Participating Cities\Municipalities\Towns	Covered Members	Rank	% of Total Covered Members	Covered Members	Rank	% of Total Covered Members		
Oklahoma City	1197	1	23.99%	991	1	22.37%		
Tulsa	829	2	16.61%	762	2	17.20%		
Norman	173	3	3.47%	159	4	3.59%		
Lawton	169	4	3.39%	176	3	3.97%		
Broken Arrow	148	5	2.97%	111	5	2.51%		
Edmond	116	6	2.32%	107	6	2.41%		
Midwest City	97	7	1.94%	93	7	2.10%		
Moore	88	8	1.76%	77	10	1.74%		
Enid	87	9	1.74%	89	8	2.01%		
Muskogee	84	10	1.68%	88	9	1.99%		
Total-10 Largest Employers	2988		59.88%	2653		59.87%		
All Other Cities\Towns	2002		40.12%	1778		40.13%		
Total Covered Members	4990		100.00%	4431		100.00%		

This table presents the ten largest participating employers by number of covered employees in the System.

### **Schedule of Participating Employers**

For the Fiscal Year Ended June 30, 2020

Oklahoma State Agencies (	E41

ABLE Commission Bureau of Narcotics OK State Bureau of Investigation

#### Oklahoma Cities, Municipalities and Towns (144)

Ada Frederick Altus Garber Alva Glenpool Grandfield Anadarko Arapaho Granite Ardmore Grove Guthrie Atoka Bartlesville Guymon Bethany Harrah Bixby Haskell Blackwell Henryetta Blair Hinton Blanchard Hobart **Boynton** Hominy **Bristow** Hugo **Broken Arrow** Idabel Calumet **Jenks** Catoosa Jones Chandler Kingfisher Checotah Kiowa Chickasha Krebs Choctaw Lamont Chouteau Lawton Claremore Lexington Cleveland Lindsay Clinton Luther Collinsville Madill Comanche Mangum Commerce Mannford Coweta Marlow Crescent McAlester Cromwell Miami Cushing Midwest City Davis Moore

Muskogee

Newcastle

Nichols Hills

Nicoma Park

Oklahoma City

Mustang

Newkirk

Noble

Norman

Nowata

Okeene

Okmulgee

Oologah

Owasso

Del City

Dewey

Disney

Drummond

Drumright

Duncan

Durant

Edmond

El Reno

Elk City

Eufaula

Forest Park

Fort Gibson

Enid

**Perkins** Perry **Piedmont** Ponca City Poteau Prague **Pryor Creek** Purcell Ringling Sallisaw Sand Springs Sapulpa Savanna Sawyer Sayre Seminole Shawnee Skiatook Spencer Stigler Stillwater Stringtown Sulphur Tahlequah Tecumseh The Village Tishomingo Tonkawa Tulsa Tuttle **Union City** Valley Brook Verdigris Vinita Wagoner Warner Warr Acres Watonga Waurika Weatherford Weleetka Wetumka Wewoka Wister Woodward

Yukon

Pauls Valley

Pawhuska

# **Membership Statistics Data**

Employer and Member Statistics As of July 1,	2020	2019
Participating Cities, Municipalities and Towns	147	146
Active Members	4,990	4,902
Deferred Option Members	2	4
Terminated Members with Refund Due	899	825
Terminated Members with Deferred Benefits	161	158
Retired Members	2,954	2,887
Beneficiaries Receiving Benefits	828	790
Disabled Members Receiving Benefits	130	138

Active Member Statistics As of July 1,	2020		2019
Total Annual Compensation (1)	\$ 351,343,791	\$	339,195,248
Average Compensation	\$ 66,347	\$	65,235
Average Active Member Age	39.7		39.9
Average Years of Credited Service	11.7		11.9

 $\begin{tabular}{ll} \textbf{(1)} - Compensation is projected one year based on salary increase assumptions. \end{tabular}$ 

Fiscal Year 2020 Refund and Benefit Payment Statistics	Count of Payments Made	Average Amount	
Refunds to Terminated Members	177	\$ 13,847	
Regular Payments to Service Retirement Members	46,597	\$ 2,638	
Payment of Death Benefits to Beneficiaries	92	\$ 5,000	
Payments under the Forward DOP	2	\$ 250,001	
Payments under the Back DOP	128	\$ 310,842	
Payments under the Payout Provision	2	\$ 348,127	

