



**Comprehensive Annual Financial Report**  
For the Fiscal Years Ended June 30, 2017 and 2016

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

# 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 **members**, both active and retired, and the important contributions they make **protecting the citizens** of Oklahoma.*

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

*Effectively **communicate** 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 **due process** regarding applications and appeals.*

*Strive to maintain **financial stability** 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, 2017 and 2016

**Steven K. Snyder**

Executive Director  
Chief Investment Officer

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  
2017 Comprehensive Annual Financial Report

## Table of Contents

<u>Introductory Section</u>	<u>Page</u>	<u>Actuarial Section</u>	<u>Page</u>
Letter of Transmittal	5	Actuarial Valuation Certification	94
Board of Trustees	8	Summary of Actuarial Valuation Results	96
Board Districts, Appointees and Designees	9	Schedule of Active Member Valuation Data	97
Organizational Chart	10	Schedule of Retirants Added to and Removed from Rolls	97
Professional Advisors and Consultants	10	Schedule of Funding Progress (Actuarial)	97
Certificate of Achievement for Excellence in Financial Reporting	11	Solvency Test	98
		Analysis of Financial Experience	99
		Summary of Actuarial Assumptions/Methods	100
		Summary of System Provisions	105
		<b><u>Statistical Section</u></b>	
<b><u>Financial Section</u></b>		Statistical Section Narrative	111
Independent Auditor's Report	14	Schedule of Changes in Fiduciary Net Position	112
Management's Discussion and Analysis	17	Schedule of Revenues by Source	113
<b><i>Financial Statements</i></b>		Schedule of Expenses by Type	113
Statements of Fiduciary Net Position	23	Schedule of Benefit Payments and Refunds by Type	114
Statements of Changes in Fiduciary Net Position	24	Funded Ratio Chart	114
Notes to the Financial Statements	25	Rate of Return by Investment Type	115
<b><i>Required Supplementary Information</i></b>		Schedule of Retired Members by Benefit Type	116
Schedule of Changes in Employers' Net Pension Liability	71	Schedule of Average Benefit Payments	117
Schedule of Employers' Net Pension Liability	73	Principal Participating Employers	118
Schedule of Contributions from Employers and Other Contributing Entities	74	Participating Employers	119
Schedule of Investment Returns	75	Membership Statistics Data	120
Notes to Required Supplementary Information	76		
<b><i>Other Supplementary Information</i></b>			
Schedule of Investment Expenses	78		
Schedule of Administrative Expenses	79		
Schedule of Professional/Consultant Fees	80		
<b><u>Investment Section</u></b>			
Investment Consultant's Report	83		
Schedule of Largest Asset Holdings	86		
Investment Portfolio by Type and Manager	87		
Private Equity by Strategy and Manager	88		
Net Performance by Investment Manager	89		
Asset Allocation Comparison	90		
Schedule of Investment Fees and Commissions	90		
Schedule of Brokerage Commissions	91		



## Introductory Section

- 5 - Letter of Transmittal
- 8 - OPPRS Board of Trustees
- 9 - OPPRS Board Districts, Appointees and Designees
- 10 - OPPRS Organizational Chart
- 10- Professional Advisors and Consultants
- 11- Certificate of Achievement for Excellence in Financial Reporting



Introductory Section



## OKLAHOMA POLICE PENSION & RETIREMENT SYSTEM

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WWW.OPPRS.OK.GOV

### Letter of Transmittal

November 29, 2017

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, 2017 and June 30, 2016. 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, 2017 and 2016, 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 141 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. For fiscal year 2017, contributions totaled \$97 million, a \$(1.1) million decrease from the prior year. Fiscal 2017 produced solid investment gains of \$242.4 million, up \$263.5 million from 2016's investment loss of \$(21.1) million. Significant equity returns, both domestically and abroad, and a moderate fixed income environment combined to produce solidly positive investment returns for fiscal year 2017, especially when compared to those produced over the two prior years.

The System's funded status improved in fiscal 2017 to 101.8% from 98.7% in the prior year. This increase in the funded status of the plan is due primarily to slower than expected growth in the System's liabilities over the last year combined with steady normal costs incurred by the plan. The System had unamortized deferred actuarial losses of \$52 million at the end of fiscal 2017, down significantly from the \$121.7 million at the end of fiscal 2016, reflective of the strong investment return realized over the last year.

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. For fiscal 2017, total expenses of the system were \$145.8 million, an increase of \$5.3 million from the prior fiscal year. This increase was primarily due to an increase in normal benefit payments and deferred option payments for the year. Refunds and administrative expenses decreased slightly for the year, due primarily to lower depreciation and legal costs.

## Investments

In order to fulfill their fiduciary responsibilities, the Board retains investment managers 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 utilizes an investment consultant 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 within an acceptable level of risk. The cornerstone of the investment strategy is to identify, locate and purchase investments that complement the existing portfolio of assets. 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 longer 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 Systems long-term objectives and tolerance for risk. As a result of this investment structure, the System had a net yield on assets of 11% for fiscal 2017, an absolute increase of 12% from the net yield of (-1)% for fiscal year 2016.

## 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 2017 and 2016 legislative sessions:

### 2017

**House Bill 1119** – Updates the rules for distributions to include rollover contributions for SIMPLE IRAs that are structured and timed in accordance with the IRS’s SIMPLE IRA regulations. Authorizes the Board to obtain records from the Council on Law Enforcement Education and Training to verify any person’s eligibility for membership in the System. Authorizes the Board to audit participating member municipalities to ensure compliance with the System’s statutes and rules, including, but not limited to, compensation used to determine a member’s paid base salary.

### 2016

**House Bill 2273** – Amends the computation of final average salary to be based specifically on paid base salary in which required contributions have been made. Amends and clarifies the definition of paid base salary, including its components and exclusions. Adds additional language regarding the purchase of transferred credited service to comply with IRS rules regarding the use of Roth and non-Roth type accounts.

## 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, 2016.

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,



Steven K. Snyder  
Executive Director  
Chief Investment Officer



Deric Berousek  
Chief Financial Officer

# OPPRS Board of Trustees



**W.B. Smith**  
Chairman  
District 7



**Ryan Perkins**  
Vice Chairman  
District 5



**Chris Cook**  
District 1



**Rob Groseclose**  
District 2



**Thomas Cooper**  
District 3



**Jim Keesee**  
District 4



**David Roberts**  
District 6



**Andy McPherson**  
Governor Appointee



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



**Susan Knight**  
Senate President Pro  
Tempore Appointee



**Tony Davenport**  
Oklahoma Municipal  
League Appointee

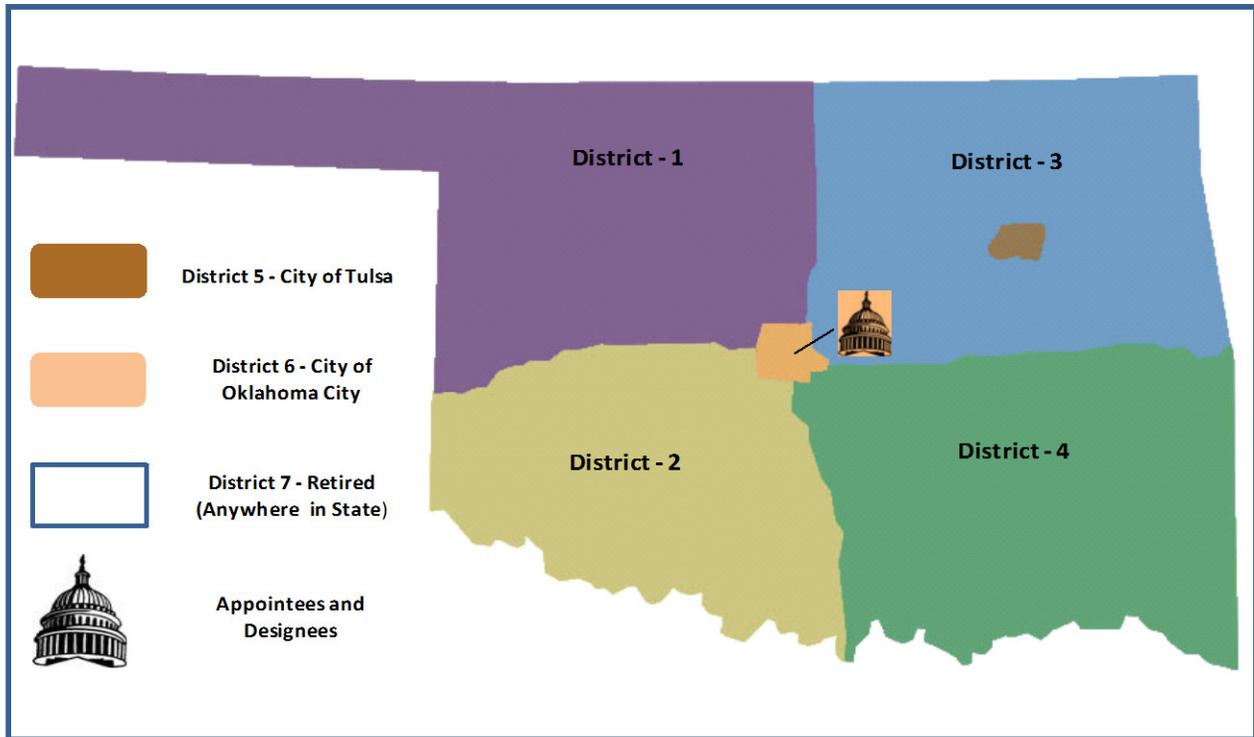


**Frank Stone**  
Designee of the State  
Insurance Commissioner



**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.

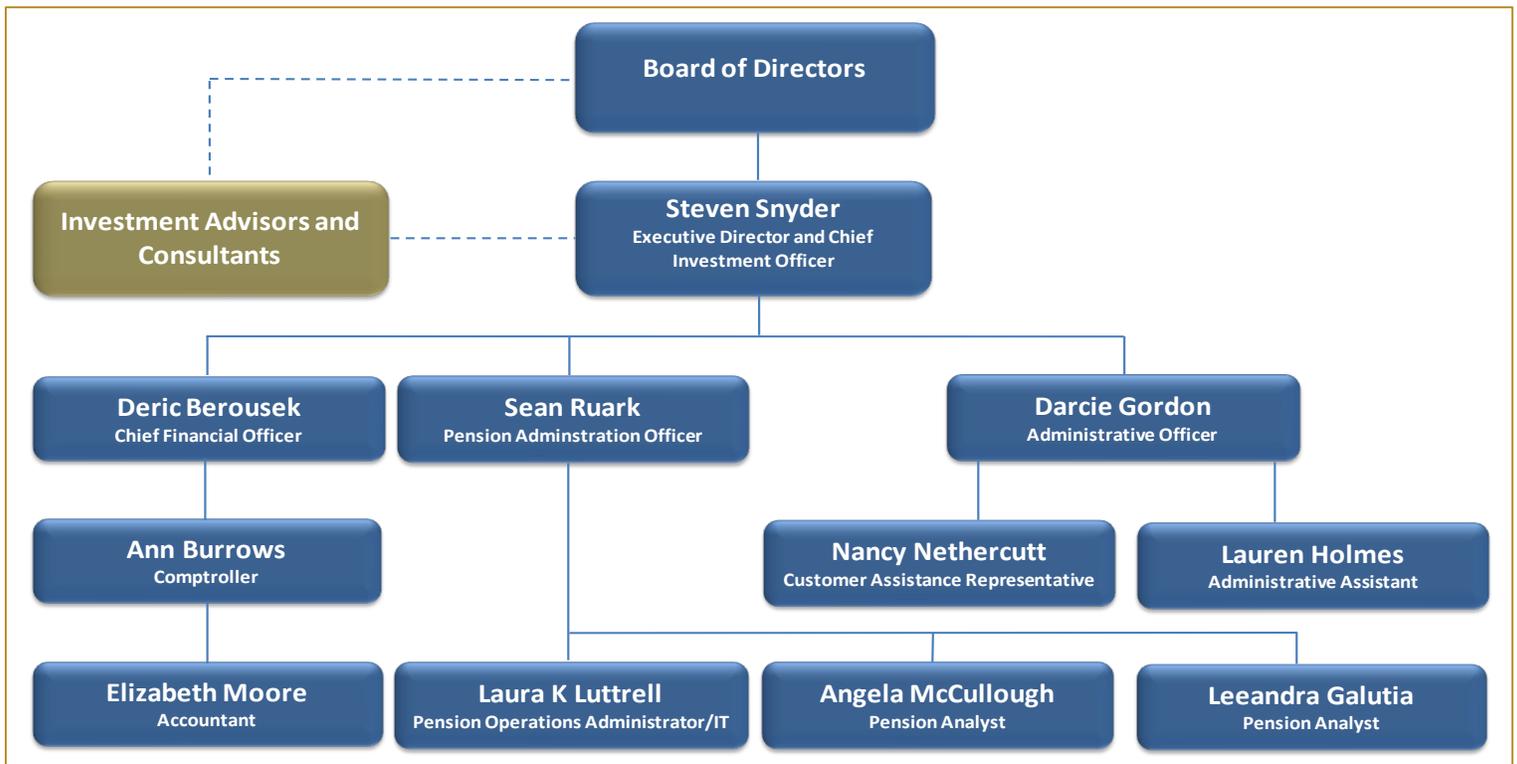
10<sup>th</sup> Member of the Board - Appointed by the Governor.

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\*

### Actuary

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

### Property Management Services

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

### Investment Consultant

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

### Independent Auditor

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

### Legal Services (Tax and Pensions)

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

### Master Trustee (Custodian)

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

\* - The schedule of Investment Expenses and Professional Consultant Fees in the Other Supplementary Information Section and the Schedule of Investment Fees (pg. 90) & Broker Commissions (pg. 91) in the Investment Section contain additional information regarding professional advisors and consultants.



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
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Presented to

Oklahoma Police Pension  
& Retirement System

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

June 30, 2016

A handwritten signature in black ink, reading "Jeffrey R. Egan". The signature is written in a cursive, flowing style.

Executive Director/CEO



## Financial Section

- 14 - Independent Auditors' Report
- 17 - Management Discussion and Analysis

### BASIC FINANCIAL STATEMENTS

- 23 - Statements of Fiduciary Net Position
- 24 - Statements of Changes in Fiduciary Net Position
- 25 - Notes to the Financial Statements

### REQUIRED SUPPLEMENTARY INFORMATION (RSI)

- 71 - Schedule of Changes in Employers' Net Pension Liability (Exhibit 1)
- 73 - Schedule Employers' Net Pension Liability (Exhibit 2)
- 74 - Schedule of Contributions from Employers and Other Contributing Entities (Exhibit 3)
- 75 - Schedule of Investment Returns (Exhibit 4)
- 76 - Notes to RSI

### OTHER SUPPLEMENTARY INFORMATION

- 78 - Schedule of Investment Expenses (Schedule 1)
- 79 - Schedule of Administrative Expenses (Schedule 2)
- 80 - Schedule of Professional/Consultant Fees (Schedule 3)



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, 2017 and 2016, 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, 2017 and 2016, 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 17 through 22 and the schedule of changes in the employers' net pension liability, the schedule of employers' net pension 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)

**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 19, 2017, 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 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 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.

A handwritten signature in black ink that reads "Finley + Cook, PLLC". The signature is written in a cursive style with a large, stylized 'F' and 'C'.

Shawnee, Oklahoma  
September 19, 2017

## 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, 2017, 2016 and 2015. 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,			% Change 2017 from 2016	% Change 2016 from 2015	% Change 2015 from 2014
	(amounts in thousands)					
	2017	2016	2015			
Fiduciary Net Position	\$ 2,395,381	\$ 2,201,671	\$ 2,264,996	8.8%	-2.8%	1.2%
Contributions:						
Participating Cities	38,887	38,533	37,261	0.9%	3.4%	4.8%
Plan members	23,916	23,787	22,867	0.5%	4.0%	3.3%
Insurance Premium Tax	34,283	35,915	35,490	-4.5%	1.2%	13.3%
Net Investment Income (loss)	242,415	(21,104)	74,554	-1248.7%	-128.3%	-74.7%
Benefits paid, including refunds and deferred option benefits	144,092	138,625	141,693	3.9%	-2.2%	18.8%
Change in Fiduciary Net Position	193,710	(63,325)	26,530	N/M	N/M	-89.9%
Funded Ratio of the Plan	101.8%	98.7%	98.2%	3.1%	0.5%	3.8%
Total Plan Membership	9,220	9,049	8,833	1.9%	2.4%	0.4%

\* - (N/M) Percentage change is not meaningful when prior period comparative amount is negative.

- During the 2017 fiscal year, strong returns across most asset categories increased fiduciary net position by \$193.7 million, or 8.8%, to \$2.40 billion. System fiduciary net position decreased \$(63.3) million, or 2.8%, to \$2.20 billion in fiscal year 2016, due to negative investment returns in a challenging return environment. Moderate investment performance in fiscal year 2015 increased net position by \$26.5 million, or 1.2%, to \$2.26 billion.
- In fiscal 2017 the System's funded ratio (actuarially) increased by 3.1% to a new high of 101.8% due to lower than expected liability increases for the year. The System's fiscal year 2016 (actuarially) funded ratio increased by .5% to 98.7% from 98.2% in fiscal year 2015. This change was modest and resulted primarily from stable actuarial asset and liability values for the year. The System's funded ratio increased 3.8% in fiscal year 2015 to 98.2% from 94.6% in fiscal year 2014 due to significant gains in the actuarial value of assets for the year. Overall, with an actuarially funded ratio 101.8%, the plan remains financially sound and exceptionally positioned to meet future liabilities.
- The System's net membership increased by 171 members in fiscal 2017, on par with expectations. The System saw its total net membership grow by 216 in fiscal year 2016 after a net increase of 31 members in fiscal 2015. Contributions from employers and members increased 0.9% and 0.5%, respectively in fiscal 2017. Fiscal 2016 contributions from participating employers and plan members increased by 3.4% and 4.0%, respectively, for the year. The State insurance premium tax contributions dipped by –

4.5%, or \$(1.15) million in fiscal 2017 after a steady string of increases in prior years. Stable State insurance premium tax collections for fiscal 2016 increased the System's portion of this tax slightly by 1.2%, providing \$425,000 more to the System than in fiscal 2015.

## 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 systems 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 System's financial activity for the years ended June 30, 2017, 2016 and 2015.

### Condensed Summary of Fiduciary Net Position

	For the Fiscal Year Ended June 30,			% Change 2017 from 2016	% Change 2016 from 2015	% Change 2015 from 2014
	2017	(amounts in thousands) 2016	2015			
Cash and cash equivalents	\$ 32,732	\$ 40,021	\$ 48,062	-18.2%	-16.7%	58.9%
Receivables	15,389	15,929	14,430	-3.4%	10.4%	18.3%
Investments, at fair value	2,352,247	2,149,725	2,207,881	9.4%	-2.6%	0.4%
Securities lending collateral	-	-	-	0.0%	0.0%	-100.0%
Capital assets	-	-	101	0.0%	-100.0%	-66.8%
<b>Total Assets</b>	<b>2,400,368</b>	<b>2,205,675</b>	<b>2,270,474</b>	<b>8.8%</b>	<b>-2.9%</b>	<b>0.9%</b>
Other liabilities	4,987	4,004	5,478	24.6%	-26.9%	82.2%
Securities lending collateral	-	-	-	0.0%	0.0%	-100.0%
<b>Total Liabilities</b>	<b>4,987</b>	<b>4,004</b>	<b>5,478</b>	<b>24.6%</b>	<b>-26.9%</b>	<b>-55.5%</b>
<b>Fiduciary Net Position</b>	<b>\$ 2,395,381</b>	<b>\$ 2,201,671</b>	<b>\$ 2,264,996</b>	<b>8.8%</b>	<b>-2.8%</b>	<b>1.2%</b>

### Condensed Summary of Changes in Fiduciary Net Position

	For the Fiscal Year Ended June 30,			% Change 2017 from 2016	% Change 2016 from 2015	% Change 2015 from 2014
	2017	(amounts in thousands) 2016	2015			
Contributions	\$ 97,086	\$ 98,235	\$ 95,618	-1.2%	2.7%	7.4%
Net investment income	242,415	(21,104)	74,554	N/M*	-128.3%	-74.7%
<b>Total Additions</b>	<b>339,501</b>	<b>77,131</b>	<b>170,172</b>	<b>340.2%</b>	<b>-54.7%</b>	<b>-55.7%</b>
Benefits and refunds paid	112,448	108,360	102,924	3.8%	5.3%	3.8%
Deferred option benefits paid	31,644	30,265	38,769	4.6%	-21.9%	92.7%
Administrative expenses	1,699	1,831	1,949	-7.2%	-6.1%	4.7%
<b>Total Deductions</b>	<b>145,791</b>	<b>140,456</b>	<b>143,642</b>	<b>3.8%</b>	<b>-2.2%</b>	<b>18.6%</b>
<b>Total Changes in Fiduciary Net Position</b>	<b>193,710</b>	<b>(63,325)</b>	<b>26,530</b>	<b>N/M*</b>	<b>N/M*</b>	<b>-89.9%</b>
Beginning Fiduciary Net Position	2,201,671	2,264,996	2,238,466	-2.8%	1.2%	13.3%
<b>Ending Fiduciary Net Position</b>	<b>\$ 2,395,381</b>	<b>\$ 2,201,671</b>	<b>\$ 2,264,996</b>	<b>8.8%</b>	<b>-2.8%</b>	<b>1.2%</b>

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

## Analysis of Overall Financial Position and Results of Operations

In fiscal 2017 the System experienced a solid increase in fiduciary net position to \$2.40 billion, an 8.8% increase over fiscal 2016. This was achieved through strong investment returns combined with stable benefit payments and expenses for the period. Contributions declined slightly in 2017, falling 1.2% on weaker insurance premium tax receipts. For the fiscal year ended June 30, 2016, the System's fiduciary net position decreased \$63.3 million, or 2.8%, to \$2.20 billion, due primarily to a directionless and challenging investment climate. Contributions from participating employers and plan members registered moderate increases in FY 2016, while insurance premium tax collections from the State were stable and slightly improved for the year, signifying stable economic conditions. Fiscal year 2015 investment returns were \$74.6 million, solidly up in a difficult return year, but well short of the record performance in 2014. At the fiscal year ended June, 2017, the number of members receiving benefits increased by 102 to 3679, increasing benefit payouts (including refunds) to \$112.5 million, an increase of \$4.1 million over 2016. Members receiving benefits increased by 119 to 3,577 for fiscal year 2016, increasing benefit payments by 5.3% to \$108.4 million, an increase of \$5.4 million over fiscal year 2015. Deferred option payouts increased slightly in 2017, up \$1.38 million over 2016, remaining relatively stable through the year. Payouts under the deferred options plan for fiscal 2016 decreased by \$8.5 million versus fiscal 2015, a 21.9% decrease for the year, as a substantially fewer members elected retirement during 2016. Since deferred option payouts are individual retirement elections, this expense can fluctuate considerably.

Fiscal year ended June 30, 2015 fiduciary net position increased \$26.5 million, or 1.2%, over fiscal 2014, primarily due to modest net investment income of \$74.5 million for the year. Contributions were up significantly for fiscal 2015, increasing 7.4% over fiscal 2014 to \$95.6 million. Regular benefit payments increased in fiscal 2015 by 3.8% to \$102.9 million, as expected, based on significant deferred option payouts which increased by \$18.6 million, or 92.7% over fiscal 2014.

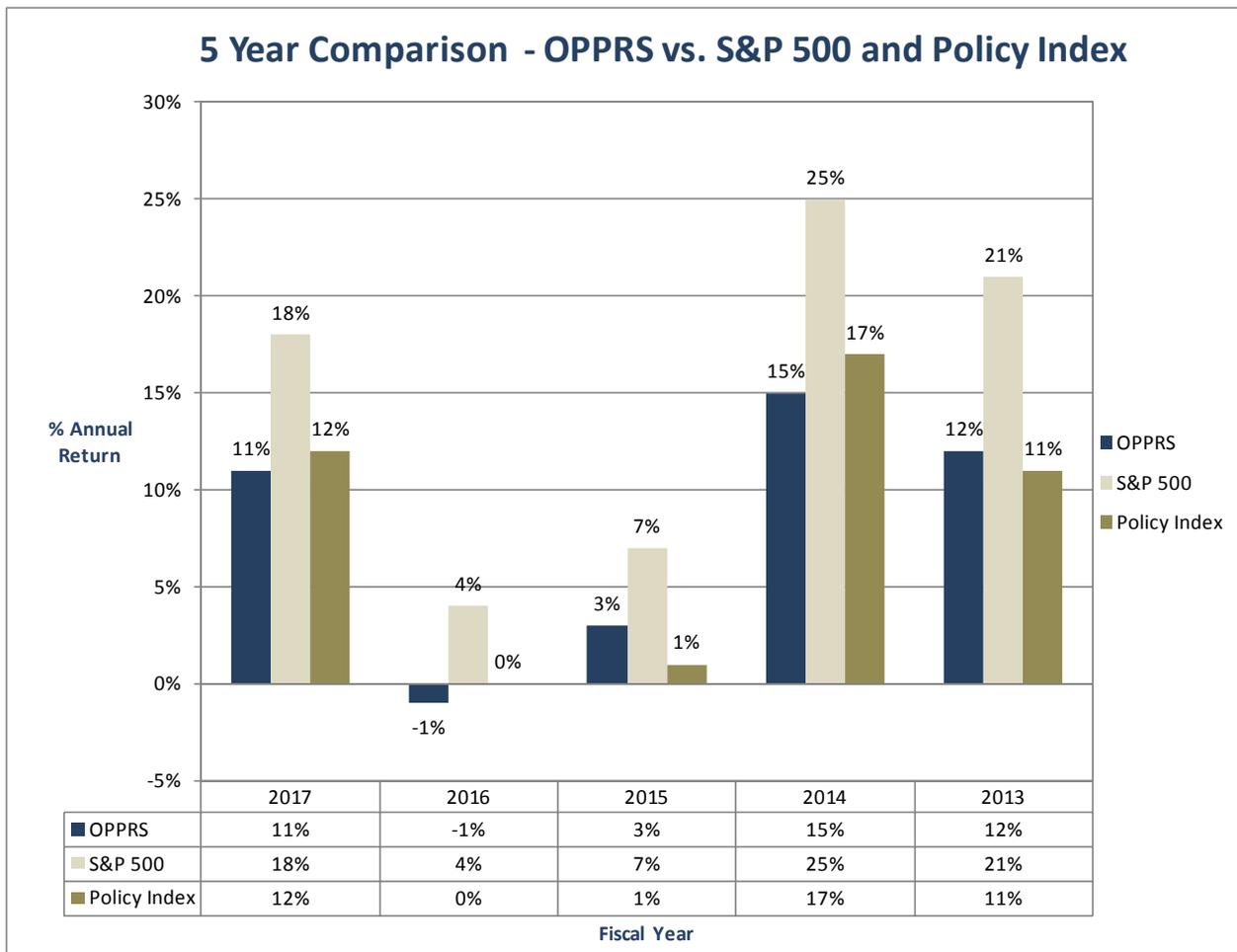
The System is funded by contributions from participating cities and their police officers, a dedicated percentage of the State of Oklahoma's insurance premium tax, and returns generated by investing the System's assets. For fiscal 2017, total contributions declined 1.2% or \$1.14 million due to a 4.5% decrease in insurance premium tax collections for the period. Contributions were up 2.7% during fiscal year 2016 compared to fiscal year 2015, due primarily to modest increases in member and employer contributions with a slight increase in insurance premium tax collections. Insurance premium tax collections increased by \$.4 million to \$35.9 million for the year, while member and employer contributions increased \$.9 million and \$1.3 million, respectively. Contributions increased significantly during fiscal year 2015 compared to fiscal year 2014, due primarily to an increase in insurance premium tax collections for the year. Presently the System receives 14% of the State's total insurance premium tax collected. The System received \$34.3 million, \$35.9 million, and \$35.5 million for the fiscal years ended June 30, 2017, 2016 and 2015, respectively.

In fiscal 2017, total benefit payments increased 3.9% to \$144.1 million, a steady and expected increase over 2016. For fiscal year 2016, total benefit payments, including refunds and deferred option benefits, decreased -2.2% to \$138.6 million, over fiscal year 2015. This was due primarily to an easing in the number of members retiring in fiscal 2016 over the elevated number of members electing retirement in 2015. Both 2017 and 2016 showed lower payments from the deferred option plans versus 2015, a period with a higher than average number of retirements. The increased retirements and deferred option participation for fiscal year 2015 led to an 18.8% increase in total benefit payments, to \$141.7 million, over fiscal year 2014.

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. Administrative expenses declined -7.2% in fiscal 2017 due to significantly reduced legal and depreciation costs. Total administrative expenses for the year ended June 30, 2016, decreased -6.1% over fiscal year 2015, due primarily to a small decline in personnel related costs and a sizable decrease in depreciation charges. Total

administrative expenses for fiscal year ended June 30, 2015, increased 4.7% over the fiscal year 2014 due to increased professional fees for the year.

The System’s net yield on average assets was approximately 11.14% for the fiscal year ended June 30, 2017, as broad equity gains in most markets offset marginally positive returns in fixed income and real estate. 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 solid total return performance over the last 5 years, exceeding 10% in 3 of those years, while using broad asset diversification policies designed to provide high participation up market returns while offering significant downside protection during difficult market conditions. 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 almost \$2.40 billion of 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 [www.OPPRS.ok.gov](http://www.OPPRS.ok.gov).

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

**STATEMENTS OF FIDUCIARY NET POSITION**

<i>June 30,</i>	<i>2017</i>	<i>2016</i>
	<i>(Amounts in Thousands)</i>	
<b>Assets</b>		
Cash and cash equivalents	\$ 32,732	40,021
Receivables:		
Interest and dividends receivable	2,966	2,882
Contributions receivable from cities	1,794	1,671
Contributions receivable from participants	1,101	1,019
Insurance premium tax receivable	7,518	7,439
Receivable from brokers	2,010	2,918
Total receivables	<u>15,389</u>	<u>15,929</u>
Investments, at fair value:		
U.S. government securities	23,529	25,337
Domestic corporate bonds	162,104	152,450
International corporate bonds and bond funds	195,207	190,549
Domestic equities	602,164	533,222
International equities	356,206	299,849
Private equity—non-real estate	199,559	188,696
Low volatility hedge funds	186,745	179,304
Long/Short hedge funds	335,626	302,409
Real estate—core and private equity	209,991	194,182
Commodities	76,866	79,627
Direct real estate—Columbus Square	4,250	4,100
Total investments, at fair value	<u>2,352,247</u>	<u>2,149,725</u>
Total assets	<u>2,400,368</u>	<u>2,205,675</u>
<b>Liabilities</b>		
Payable to brokers	1,214	932
Accounts payable	687	871
Deferred option benefits due and currently payable	3,086	2,201
Total liabilities	<u>4,987</u>	<u>4,004</u>
Fiduciary net position restricted for pensions	<u>\$ 2,395,381</u>	<u>2,201,671</u>

See Independent Auditors' Report.  
See accompanying notes to financial statements.

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

**STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**

<i>Years Ended June 30,</i>	<i>2017</i>	<i>2016</i>
	<i>(Amounts in Thousands)</i>	
<b>Additions</b>		
Contributions:		
Cities	\$ 38,887	38,533
Plan members	23,916	23,787
Insurance premium tax	34,283	35,915
Total contributions	<u>97,086</u>	<u>98,235</u>
Investment income (loss):		
From investing activities:		
Net appreciation (depreciation) in fair value of investments	241,989	(24,165)
Interest	7,241	6,842
Dividends	7,330	9,109
Other	310	412
Total investment income (loss)	<u>256,870</u>	<u>(7,802)</u>
Less investment expense	<u>(14,455)</u>	<u>(13,302)</u>
Income (loss) from investing activities	<u>242,415</u>	<u>(21,104)</u>
Net investment income (loss)	<u>242,415</u>	<u>(21,104)</u>
Total additions	<u>339,501</u>	<u>77,131</u>
<b>Deductions</b>		
Benefits paid	110,496	106,326
Deferred option benefits	31,644	30,265
Refunds of contributions	1,952	2,034
Administrative expenses	1,699	1,831
Total deductions	<u>145,791</u>	<u>140,456</u>
Net increase (decrease) in net position	193,710	(63,325)
Net position restricted for pensions:		
Beginning of year	<u>2,201,671</u>	<u>2,264,996</u>
End of year	<u>\$ 2,395,381</u>	<u>2,201,671</u>

See Independent Auditors' Report.  
See accompanying notes to financial statements.

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

**NOTES TO FINANCIAL STATEMENTS**

**June 30, 2017 and 2016**

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**(1) NATURE OF OPERATIONS**

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 141 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 7<sup>th</sup> 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. The 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.

See Independent Auditors’ Report.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(1) NATURE OF OPERATIONS, CONTINUED**

The System's participants at June 30 consisted of:

	<u>2017</u>	<u>2016</u>
Retirees and beneficiaries currently receiving benefits	3,658	3,550
Vested members with deferred benefits	132	132
Deferred Option plan members	14	19
	<u>3,804</u>	<u>3,701</u>
Active plan members:		
Vested	2,446	2,430
Nonvested	2,970	2,918
Total active plan members	<u>5,416</u>	<u>5,348</u>
Total members	<u>9,220</u>	<u>9,049</u>
Number of participating municipalities and state agencies	<u>141</u>	<u>138</u>

**(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 comprise the fiduciary-pension trust funds of the State of Oklahoma. Administrative expenses are paid with funds provided by operations of the Plan.

See Independent Auditors' Report.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Recent Accounting Pronouncements**

In June 2015, GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75). GASB 75 addresses employer and governmental non-employer contributing entities' accounting and financial reporting when participating in an other postemployment benefit (OPEB) plan. This statement requires proper recognition of OPEB liabilities by employers and requires a more comprehensive measure of OPEB expense. More robust disclosures will also improve transparency and accountability. GASB 75 is effective for financial statements for the periods beginning after June 15, 2017. The Plan will adopt GASB 75 effective July 1, 2017, for the June 30, 2018, reporting year. The Plan does not expect GASB 75 to have a significant impact on the financial statements.

In August 2015, GASB issued Statement No. 77, *Tax Abatement Disclosures* (GASB 77). GASB 77 provides financial reporting and disclosure guidance to governments that have either entered into tax abatement agreements or that have revenues affected by tax abatements entered into by another government. Governments will generally use tax abatements to encourage specific economic development that benefit either the government or its citizens by forgoing certain taxes. The Plan adopted this statement on July 1, 2016. The Plan has no items to be reported, and the adoption had no significant impact on the Plan's financial statements.

In December 2015, GASB issued Statement No. 78, *Pensions Provided through Certain Multiple-Employer Defined Benefit Pension Plans* (GASB 78). GASB 78 addresses an issue that arose as a result of the employer reporting for pension plans under GASB 68, *Accounting and Financial Reporting for Pensions*. Certain state and local governments participate in a cost-sharing multi-employer pension plan that (1) is not a state or local governmental plan, (2) provides defined benefits both to employees of state or local governmental employers and to employees of employers that are not state or local governmental employers, and (3) has no predominant state or local governmental employer. This Statement establishes the requirements for recognition, reporting, disclosures, and required supplementary information for governmental employers that provide pensions through pension plans with the above-mentioned characteristics. The Plan adopted this statement on July 1, 2016. The adoption had no significant impact on the Plan's financial statements.

In January 2016, GASB issued Statement No. 80, *Blending Requirements for Certain Component Units* (GASB 80). GASB 80 amends blending requirements for the financial statements of component units to include criteria requiring blending of a component unit organized as a not-for-profit corporation in which the primary government is the sole corporate member. The Plan adopted this statement on July 1, 2016. The adoption had no significant impact on the Plan's financial statements.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Recent Accounting Pronouncements, Continued**

In March 2016, GASB issued Statement No. 81, *Irrevocable Split-Interest Agreements* (GASB 81). GASB 81 provides recognition and measurement guidance for situations in which a government is one of the beneficiaries of an irrevocable split-interest agreement. Irrevocable split-interest agreements are a type of giving by a donor to provide resources to two or more beneficiaries, including governments. GASB 81 provides the recognition and reporting requirements applicable when a government is one of the parties to such an agreement. The Plan will adopt GASB 81 effective July 1, 2017, for the June 30, 2018, reporting year. The Plan does not expect GASB 81 to have a significant impact on the financial statements.

In November 2016, GASB issued Statement No. 83, *Certain Asset Retirement Obligations* (GASB 83). GASB 83 provides accounting and reporting requirements for certain asset retirement obligations (ARO) that arise from legally enforceable liabilities associated with the retirement of certain tangible capital assets. ARO's require an internal and external obligating event and the costs to be reasonably estimable for the incurrence of such a liability. The Plan will adopt GASB 83 effective July 1, 2018, for the June 30, 2019, reporting year. The Plan does not expect GASB 83 to have a significant impact on the financial statements.

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities* (GASB 84). GASB 84 improves guidance regarding the recognition and reporting of fiduciary activities. GASB 84 identifies four types of reportable fiduciary fund types, including 1) pension (and other employee benefit) trust funds, 2) investment trust funds, 3) private-purpose trust funds, and 4) custodial funds. GASB 84 outlines the accounting and disclosure requirements for operating structures that qualify as a fiduciary activity. The Plan will adopt GASB 84 effective July 1, 2019, for the June 30, 2020, reporting year. The Plan does not expect GASB 84 to have a significant impact on the financial statements.

In March 2017, GASB issued Statement No 85, *Omnibus 2017* (GASB 85). GASB 85 clarified several practice issues identified during the application of earlier GASB pronouncements. GASB 85 addresses topics including the blending of component units, goodwill and negative goodwill, fair value measurement and application, employer accounting and reporting for pensions and OPEB, and reporting by OPEB plans. The Plan will adopt GASB 85 on July 1, 2017, for the June 30, 2018, reporting year. The Plan does not expect GASB 85 to have a significant impact on the financial statements.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Recent Accounting Pronouncements, Continued**

In May 2017, GASB issued Statement No. 86, *Certain Debt Extinguishment Issues* (GASB 86). GASB 86 provides guidance regarding the in-substance defeasance of debt. Normally, a government will issue new debt at favorable rates and place the proceeds in trust to eliminate the liability of an existing debt. GASB 86 provides accounting and reporting guidance for situations where a government irrevocably sets aside cash and other assets to defease an existing debt. Guidance also addresses prepaid insurance related to extinguished debt and the financial valuation and disclosure of other assets used to defease debt. The Plan will adopt GASB 86 on July 1, 2017, for the June 30, 2018, reporting year. The Plan does not expect GASB 86 to have a significant impact on the financial statements.

**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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**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, 2017 and 2016, 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.

**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.

*Investment Allocation Policy*—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 fund, and absolute return strategies; and 15% of assets in real assets to include real estate, commodities, and other strategies.

*Significant Investment Policy Changes Made During the Year*—During the year ended June 30, 2017, there were no significant investment policy changes. For the fiscal year ended June 30, 2016, the Board expanded the Global Fixed Income allocation to provide greater detail. The Global Fixed Income category with an allocation range of 10% to 20% has been replaced by Core Bonds with an allocation range of 7.5% to 20%, Multi-Sector with an allocation range of 5% to 10%, and Absolute Return with an allocation range of 5% to 10%.

*Rate of Return*—For the years ended June 30, 2017 and 2016, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 11.11% and (0.94)%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Investments, Continued**

*Method Used to Value Investments*—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:

1. Level 1—Unadjusted quoted prices in active markets for identical assets.
2. Level 2—Quoted prices for similar assets, or inputs that are observable or other forms of market corroborated inputs.
3. 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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Investments, Continued**

*Method Used to Value Investments, Continued*

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.

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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Investments, Continued**

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.

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

Classification of <u>Investment</u>	Name of <u>Organization</u>	Shares <u>Held</u>	2017	
			<u>Cost</u>	<u>Fair Value</u>
			<i>(Amounts in Thousands)</i>	
Low volatility hedge funds	PAAMCO	126,868,066	\$ 70,299	126,868
Long/short hedge funds	Grosvenor	335,626,204	215,200	335,626
Domestic equities	Northern Trust	15,406,610	320,452	412,054
International equities	Mondrian	3,939,387	56,861	131,552
International corporate bonds and private equity—non-real estate	Oaktree Capital Mgmt.	15,110,826	124,700	133,654

\* 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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Investments, Continued**

Classification of <u>Investment</u>	Name of <u>Organization</u>	Shares <u>Held</u>	2016	
			<u>Cost</u>	<u>Fair Value</u>
Low volatility hedge funds	PAAMCO	179,300,721	\$ 105,000	179,304
Long/short hedge funds	Grosvenor	302,409,344	215,200	302,409
Domestic equities	Northern Trust	17,032,364	354,290	386,004
International equities	Mondrian	3,939,387	56,861	113,048
International corporate bonds and private equity—non-real estate	Oaktree Capital Mgmt.	15,677,274	120,576	121,636

\* 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.

**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 2017 or 2016.

**Capital Assets**

Capital assets, which consist of software, are stated at cost less accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful life of the related asset (5 years). Depreciation of the new software began in fiscal year 2011 and amounted to approximately \$0 for fiscal year 2017 and \$101,405 for fiscal year 2016. Capital assets were fully depreciated as of June 30, 2016 and June 30, 2017.

**Income Taxes**

The Plan is exempt from federal and state income taxes.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**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, 2017. The lease has been renewed for the period July 1, 2017, through June 30, 2018. Total lease expense was approximately \$89,000 for each of the years ended June 30, 2017 and 2016.

***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, 2017 and 2016, approximately \$117,000 and \$129,000, respectively, was included in accounts payable as the accrual for compensated absences.

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

	<u>2017</u>	<u>2016</u>
Balance at beginning of year	\$ 129,284	128,134
Additions and transfers	80,542	63,044
Amount used	<u>(93,227)</u>	<u>(61,894)</u>
Balance at end of year	<u>\$ 116,599</u>	<u>129,284</u>

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Administrative Items, Continued**

***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, 5801 N. Broadway Extension, Suite 200, Oklahoma City, OK 73118.

***Defined Benefit Plan***

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, 2017, 2016, and 2015. During 2017, 2016, and 2015, totals of \$158,085, \$151,095, and \$154,541, respectively, were paid to OPERS. The System has contributed 100% of required contributions to OPERS for 2017, 2016, and 2015. The System's and the employees' portions of those amounts were as follows:

	<u>2017</u>	<u>2016</u>	<u>2015</u>
System's portion	\$ 130,420	124,653	127,496
Employees' portion	<u>27,665</u>	<u>26,442</u>	<u>27,045</u>
	<u>\$ 158,085</u>	<u>151,095</u>	<u>154,541</u>

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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Administrative Items, Continued**

***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 the year ended June 30, 2017, the System and employees had the following contributions to Pathfinder. There were not any contributions to Pathfinder for the year ended June 30, 2016.

System's portion	\$	7,264
Employees' portion		<u>3,082</u>
	<u>\$</u>	<u>10,346</u>

***Risk Management***

The Risk Management Division of the Department of Central Services (the “Division”) 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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, CONTINUED**

**Date of Review of Subsequent Events**

The Plan has evaluated subsequent events through September 19, 2017, 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.

**(3) DESCRIPTION OF THE PLAN**

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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(3) DESCRIPTION OF THE PLAN, CONTINUED**

**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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(3) DESCRIPTION OF THE PLAN, CONTINUED**

**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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(3) DESCRIPTION OF THE PLAN, CONTINUED**

**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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(4) CASH, CASH EQUIVALENTS, AND INVESTMENTS**

**Cash and Cash Equivalents**

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

	<u>2017</u>	<u>2016</u>
	<i>(Amounts in Thousands)</i>	
Short-term investments:		
OK INVEST	\$ 7,913	19,509
Domestic	<u>24,796</u>	<u>20,460</u>
Total short-term investments	<u>32,709</u>	<u>39,969</u>
Cash—Commerce Bank; BNY Mellon	<u>23</u>	<u>52</u>
Total cash and cash equivalents	<u>\$ 32,732</u>	<u>40,021</u>

At June 30, 2017 and 2016, as a result of outstanding checks and deposits, the carrying amount of the Plan's OK INVEST account totaled \$7,912,676 and \$19,509,952, respectively, and the bank balance totaled \$11,497,347 and \$22,334,861, respectively. The carrying amounts of the domestic short-term investment and cash on deposit with BNY Mellon and Commerce Bank were the same as the bank balances at June 30, 2017 and 2016.

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:

	<u>2017</u>	<u>2016</u>
U.S. agencies	\$ 4,846,682	9,205,549
Mortgage-backed agencies	4,605,941	8,983,514
U.S. Treasury notes	53,037	290,920
Municipal bonds	180,048	387,719
Certificates of deposit	512,178	808,003
Commercial paper	110,153	195,122
Money market mutual funds	<u>1,189,308</u>	<u>2,464,034</u>
	<u>\$ 11,497,347</u>	<u>22,334,861</u>

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(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, 2017 and 2016, approximately \$24,796,000 and \$20,460,000, 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.

See Independent Auditors' Report.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**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.

<u>Currency</u>	2017		
	<u>Equities</u>	<u>Corporate Bonds and Bond Funds</u>	<u>Total</u>
<i>(Amounts in Thousands)</i>			
Commingled funds:			
Barings Focused International Equity Fund	\$ 112,010	-	112,010
Mondrian International Equity Fund	131,552	-	131,552
Alliance Bernstein EM Strategic Core Fund	78,872	-	78,872
Wasatch Emerging Markets Small Capitalization Fund	33,772	-	33,772
Loomis Sayles World Bond Fund	-	94,897	94,897
Oaktree Global High Yield Bond Fund	-	89,732	89,732
OCM International Convertible Fund	-	10,578	10,578
	<u>\$ 356,206</u>	<u>195,207</u>	<u>551,413</u>
<u>Currency</u>	2016		
	<u>Equities</u>	<u>Corporate Bonds and Bond Funds</u>	<u>Total</u>
<i>(Amounts in Thousands)</i>			
Commingled funds:			
Barings Focused International Equity Fund	\$ 93,032	-	93,032
Mondrian International Equity Fund	113,048	-	113,048
Northern Trust Emerging Mkts. Index Fund	63,653	-	63,653
Wasatch Emerging Markets Small Capitalization Fund	30,116	-	30,116
Loomis Sayles World Bond Fund	-	95,889	95,889
Oaktree Global High Yield Bond Fund	-	80,259	80,259
OCM International Convertible Fund	-	14,401	14,401
	<u>\$ 299,849</u>	<u>190,549</u>	<u>490,398</u>

See Independent Auditors' Report.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**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.
- Northern Trust Emerging Markets Index Fund—The fund invests in equity securities and will seek to replicate the MSCI Emerging Markets Equity Index. The fund will primarily hold equity securities in business enterprises domiciled outside the U.S.
- Alliance Bernstein Emerging Markets Strategic Core Equity—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 fixed-income 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 High Yield Bond Fund—The fund invests primarily in corporate high-yield bonds, emphasizing issuers in North America and Europe.
- OCM (Oaktree Capital Management) International Convertible Fund—The fund seeks a high level of total return through a combination of current income and capital appreciation by investing primarily in convertible securities of issuers located outside the United States. Convertible securities may consist of bonds, debentures, notes, preferred stock, or other securities that can be converted to common stock or other equity securities.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**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:

<u>Investment Type</u>	<u>Moody's Ratings</u> <u>(Unless Noted)</u>	<u>2017</u>	
		<u>Fair Value</u>	<u>Fair Value as a Percent of Total Fixed Maturity Fair Value</u>
<i>(Amounts in Thousands)</i>			
U.S. government agency securities	Aaa	\$ 7,475	31.77%
U.S. Treasury securities	UST <sup>(1)</sup>	16,054	68.23%
<b>Total U.S. government securities</b>		<b>\$ 23,529</b>	<b>100.00%</b>
Domestic corporate bonds	Aaa	\$ 46,956	28.96%
	AAA (SP)	764	0.47%
	AA+ (SP)	903	0.56%
	Aa2	5,802	3.58%
	Aa3	2,431	1.50%
	A1	4,335	2.67%
	A2	7,232	4.46%
	A3	19,437	11.99%
	Baa1	33,056	20.39%
	Baa2	11,990	7.40%
	Baa3	9,953	6.14%
	Ba1	254	0.16%
	Not Rated <sup>(2)</sup>	18,991	11.72%
<b>Total domestic corporate bonds</b>		<b>\$ 162,104</b>	<b>100.00%</b>
International corporate bonds and bond funds	Not Rated <sup>(2)</sup>	\$ 195,207	100.00%
<b>Total international corporate bonds and bond funds</b>		<b>\$ 195,207</b>	<b>100.00%</b>

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

<sup>(2)</sup> Commingled funds. Management believes the underlying investments of the commingled funds meet the investment policy requiring equal to or better than Moody's Baa3 or Standard & Poor's BBB.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Credit Risk, Continued**

<u>Investment Type</u>	<u>Moody's Ratings</u> <u>(Unless Noted)</u>	2016	
		<u>Fair Value</u>	Fair Value as a Percent of Total Fixed Maturity <u>Fair Value</u>
		<i>(Amounts in Thousands)</i>	
U.S. government agency securities	Aaa	\$ 8,338	32.91%
U.S. Treasury securities	UST <sup>(1)</sup>	<u>16,999</u>	<u>67.09%</u>
<b>Total U.S. government securities</b>		<b><u>\$ 25,337</u></b>	<b><u>100.00%</u></b>
Domestic corporate bonds	Aaa	\$ 44,120	28.93%
	AA+ (SP)	1,171	0.77%
	Aa2	7,864	5.16%
	AA (SP)	1,433	0.94%
	Aa3	3,608	2.37%
	AA- (SP)	1,368	0.90%
	A1	2,254	1.48%
	A2	7,929	5.20%
	A3	18,473	12.12%
	Baa1	32,082	21.04%
	Baa2	13,677	8.97%
	Baa3	4,191	2.75%
	Ba1	1,340	0.88%
	Ba2	606	0.40%
	Not Rated <sup>(2)</sup>	<u>12,334</u>	<u>8.09%</u>
<b>Total domestic corporate bonds</b>		<b><u>\$ 152,450</u></b>	<b><u>100.00%</u></b>
International corporate bonds and bond funds	Not Rated <sup>(2)</sup>	<u>\$ 190,549</u>	<u>100.00%</u>
<b>Total international corporate bonds and bond funds</b>		<b><u>\$ 190,549</u></b>	<b><u>100.00%</u></b>

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

<sup>(2)</sup> Commingled funds. Management believes the underlying investments of the commingled funds meet the investment policy requiring equal to or better than Moody's Baa3 or Standard & Poor's BBB.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**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.

<u>Investment Type</u>	2017				<u>Total Fair Value</u>
	<u>Investment Maturities at Fair Value (in Years)</u>				
	<u>Less Than 5</u>	<u>5 or More, Less Than 10</u>	<u>10 or More</u>	<u>Investments with No Duration</u>	
	<i>(Amounts in Thousands)</i>				
<b>U.S. government securities:</b>					
U.S. government agency	\$ -	-	7,475	-	7,475
U.S. Treasury	4,498	-	11,556	-	16,054
<b>Total U.S. government securities</b>	<u>4,498</u>	<u>-</u>	<u>19,031</u>	<u>-</u>	<u>23,529</u>
<b>Domestic corporate bonds:</b>					
Commercial mortgage-backed securities	-	-	3,384	-	3,384
Corporates and other credit	52,774	23,631	21,109	-	97,514
U.S. government mortgages	312	2,889	39,014	-	42,215
Venture capital	-	-	-	10,459	10,459
U.S. fixed-income funds	-	-	-	8,532	8,532
<b>Total domestic corporate bonds</b>	<u>53,086</u>	<u>26,520</u>	<u>63,507</u>	<u>18,991</u>	<u>162,104</u>
<b>International corporate bonds and bond funds</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>195,207</u>	<u>195,207</u>
	<u>\$ 57,584</u>	<u>26,520</u>	<u>82,538</u>	<u>214,198</u>	<u>380,840</u>

As noted above, the Plan had approximately \$42,215,000 of investments in U.S. government mortgages, of which \$22,516,000 represents FNMA loans and \$19,699,000 represents FHLMC mortgages. U.S. government agency securities of \$7,475,000 represent GNMA mortgages.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Interest Rate Risk, Continued**

<u>Investment Type</u>	2016				
	<u>Investment Maturities at Fair Value (in Years)</u>				
	<u>Than 5</u>	<u>More,</u>	<u>More</u>	<u>with No</u>	<u>Value</u>
	<i>(Amounts in Thousands)</i>				
<b>U.S. government securities:</b>					
U.S. government agency	\$ -	-	8,338	-	8,338
U.S. Treasury	6,714	10,285	-	-	16,999
<b>Total U.S. government securities</b>	<u>6,714</u>	<u>10,285</u>	<u>8,338</u>	<u>-</u>	<u>25,337</u>
<b>Domestic corporate bonds:</b>					
Commercial mortgage-backed securities	-	-	7,971	-	7,971
Corporates and other credit	51,679	20,080	22,086	-	93,845
U.S. government mortgages	631	3,845	33,824	-	38,300
Venture capital	-	-	-	6,517	6,517
U.S. fixed-income funds	-	-	-	5,817	5,817
<b>Total domestic corporate bonds</b>	<u>52,310</u>	<u>23,925</u>	<u>63,881</u>	<u>12,334</u>	<u>152,450</u>
<b>International corporate bonds and bond funds</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>190,549</u>	<u>190,549</u>
	<u>\$ 59,024</u>	<u>34,210</u>	<u>72,219</u>	<u>202,883</u>	<u>368,336</u>

As noted above, the Plan had approximately \$38,300,000 of investments in U.S. government mortgages, of which \$20,209,000 represents FNMA loans and \$18,091,000 represents FHLMC mortgages. U.S. government agency securities of \$8,338,000 represent GNMA mortgages.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value**

	Amounts Measured at Fair Value	Fair Value Measurements at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<i>June 30, 2017</i>				
<b><u>Investments by Fair Value Level</u></b>				
<b>Cash and cash equivalents:</b>				
OK INVEST—State managed short-term high liquidity	\$ 7,936	-	7,936	-
BNY Mellon—STIF-type investment; high liquidity	24,796	-	24,796	-
Total cash equivalents measured at fair value	<u>\$ 32,732</u>	<u>-</u>	<u>32,732</u>	<u>-</u>
<b>Debt securities:</b>				
U.S. government agency	\$ 7,475	-	7,475	-
U.S. Treasury	16,054	16,054	-	-
Domestic corporate bonds:				
Commercial mortgage-backed securities	3,384	-	3,384	-
Corporate bonds	97,514	-	97,514	-
U.S. government mortgages	42,215	-	42,215	-
Oaktree High Income Convertible Fund	10,459	-	10,459	-
Oaktree Commingled U.S. Fixed Income Fund	8,532	-	8,532	-
International corporate bonds:				
Oaktree Global High Yield Bond Fund	89,732	-	89,732	-
OCM International Convertible Bond Fund	10,578	-	10,578	-
Loomis Sayles World Bond Fund	94,897	-	94,897	-
Total debt securities	<u>380,840</u>	<u>16,054</u>	<u>364,786</u>	<u>-</u>
<b>Equity securities—domestic:</b>				
Common stock—custodial account	183	183	-	-
Domestic Large Cap—				
Northern Trust Russell 1000 Index Fd	412,054	-	412,054	-
Domestic Small Cap Value Focus—Boston Partners	108,372	108,372	-	-
Domestic Small Cap Growth Focus—Cortina	81,555	81,555	-	-
Total domestic equities	<u>602,164</u>	<u>190,110</u>	<u>412,054</u>	<u>-</u>

(Continued)

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

	Amounts Measured at Fair Value	Fair Value Measurements at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<i>June 30, 2017</i>				
<b><u>Investments by Fair Value Level, Continued</u></b>				
<b>Equity securities—international:</b>				
Intl. Equities—Barings Focused Intl Equity Fund (developed mkts)	112,010	-	112,010	-
Intl. Equities—Value Focus—Mondrian Partners	131,552	-	131,552	-
Intl. Emerging Markets—Wasatch EM Small Cap Fund	33,772	-	33,772	-
Intl. Emerging Markets—AB EM Strategic Core	78,872	-	78,872	-
Total international equities	<u>356,206</u>	<u>-</u>	<u>356,206</u>	<u>-</u>
<b>Private equity:</b>				
Private equity—non-real estate focused	199,559	-	-	199,559
Real estate	56,263	-	-	56,263
Total private equity	<u>255,822</u>	<u>-</u>	<u>-</u>	<u>255,822</u>
<b>Real estate—direct ownership—income producing:</b>				
Total direct ownership real estate	<u>4,250</u>	<u>-</u>	<u>-</u>	<u>4,250</u>
<b>Investments measured at net asset value (NAV):</b>				
Low Volatility Hedge Fund—PAAMCO	126,868			
Long/Short Equity Hedge Fund— Grosvenor Class A & B	335,626			
Wellington Global Total Return Fund	59,877			
Core Real Estate—JP Morgan Strategic Property Fund	115,904			
Core Real Estate—Blackstone Property Partners	37,824			
Commodities—Gresham Partners—TAP Fund	47,297			
Commodities—Mt. Lucas—MLM Macro-Peak	29,569			
Total investments measured at NAV	<u>752,965</u>			
Total investments measured at fair value	<u>\$ 2,352,247</u>			

See Independent Auditors' Report.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

	Amounts Measured at <u>Fair Value</u>	Fair Value Measurements at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<i>June 30, 2016</i>				
<b><u>Investments by Fair Value Level</u></b>				
<i>Amounts in Thousands</i>				
<b>Cash and cash equivalents:</b>				
OK INVEST—State managed short-term high liquidity	\$ 19,509	-	19,509	-
BNY Mellon—STIF-type investment; high liquidity	<u>20,460</u>	-	<u>20,460</u>	-
Total cash equivalents measured at fair value	<u>\$ 39,969</u>	-	<u>39,969</u>	-
<b>Debt securities:</b>				
U.S. government agency	\$ 8,338	-	8,338	-
U.S. Treasury	16,999	16,999	-	-
Domestic corporate bonds:				
Commercial mortgage-backed securities	7,971	-	7,971	-
Corporate bonds	93,845	-	93,845	-
U.S. government mortgages	38,300	-	38,300	-
Oaktree High Income Convertible Fund	6,517	-	6,517	-
Oaktree Commingled U.S. Fixed Income Fund	5,817	-	5,817	-
International corporate bonds:				
Oaktree Global High Yield Bond Fund	80,259	-	80,259	-
OCM International Convertible Bond Fund	14,401	-	14,401	-
Loomis Sayles World Bond Fund	<u>95,889</u>	-	<u>95,889</u>	-
Total debt securities	<u>368,336</u>	<u>16,999</u>	<u>351,337</u>	-
<b>Equity securities—domestic:</b>				
Common stock—custodial account	182	182	-	-
Domestic large cap—				
Northern Trust Russell 1000 Index Fd	386,004	-	386,004	-
Domestic Small Cap Value Focus—Boston Partners	85,200	85,200	-	-
Domestic Small Cap Growth Focus—Cortina	<u>61,836</u>	<u>61,836</u>	-	-
Total domestic equities	<u>533,222</u>	<u>147,218</u>	<u>386,004</u>	-

(Continued)

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

	Amounts Measured at <u>Fair Value</u>	Fair Value Measurements at Reporting Date Using		
		Quoted Prices in Active Markets for Identical Assets <u>(Level 1)</u>	Significant Other Observable Inputs <u>(Level 2)</u>	Significant Unobservable Inputs <u>(Level 3)</u>
<i>June 30, 2016</i>				
<b><u>Investments by Fair Value Level, Continued</u></b>				
<i>Amounts in Thousands</i>				
<b>Equity securities—international:</b>				
Intl. Equities—Barings Focused Intl Equity Fund (developed mkts)	93,032	-	93,032	-
Intl. Equities—Value Focus—Mondrian Partners	113,048	-	113,048	-
Intl. Emerging Markets—Wasatch EM Small Cap Fund	30,116	-	30,116	-
Intl. Emerging Markets—Northern Trust EM Index Fund	<u>63,653</u>	<u>-</u>	<u>63,653</u>	<u>-</u>
Total international equities	<u>299,849</u>	<u>-</u>	<u>299,849</u>	<u>-</u>
<b>Private equity:</b>				
Private equity—non-real estate focused	188,696	-	-	188,696
Real estate	<u>61,277</u>	<u>-</u>	<u>-</u>	<u>61,277</u>
Total private equity	<u>249,973</u>	<u>-</u>	<u>-</u>	<u>249,973</u>
<b>Real estate—direct ownership—income producing:</b>				
Total direct ownership real estate	<u>4,100</u>	<u>-</u>	<u>-</u>	<u>4,100</u>
<b>Investments measured at net asset value (NAV):</b>				
Low Volatility Hedge Fund—PAAMCO	179,304			
Long/Short Equity Hedge Fund— Grosvenor Class A & B	302,409			
Core Real Estate—JP Morgan Strategic Property Fund	98,343			
Core Real Estate—Blackstone Property Partners	34,562			
Commodities—Gresham Partners—TAP Fund	49,962			
Commodities—Mt. Lucas—MLM Macro-Peak	<u>29,665</u>			
Total investments measured at NAV	<u>694,245</u>			
Total investments measured at fair value	<u>\$2,149,725</u>			

See Independent Auditors' Report.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**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.

*Fair Value of Debt Securities*—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 as an actively managed investment account with Oaktree Capital Management that focuses primarily on domestic and international fixed income and debt type securities. The account holds the following four separate investment mandates:

- High Income Convertible Fund
- Commingled U.S. Fixed Income Fund
- Global High Yield Bond Fund
- International Convertible Bond Fund

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

*Fair Value of Debt Securities—Continued*

The investments in these different style mandates are held in commingled accounts where the underlying investments are priced in either Level 1 or Level 2 of the fair value hierarchy, using either quoted prices in active markets or other market corroborated inputs. The Oaktree account is classified in Level 2 of the fair value hierarchy based on the aggregation of the investments held in the various funds. Oaktree prices the various funds monthly and offers monthly liquidity.

*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.

*Boston Partners (Small Cap Value Focus)*—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.

*Cortina (Small Cap Growth Focus)*—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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

*Fair Value of Equity Securities—Continued*

INTERNATIONAL

*AllianceBernstein (AB) Emerging Markets Strategic Core Equity*—The Plan initiated an investment with AllianceBernstein in November 2016 from the liquidation of its holdings in the NT EM 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.

*Barings Focused International Equity*—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.

*Mondrian Partners International Equity Fund L.P.*—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.

*Northern Trust Emerging Markets Index Fund*—In order to maintain investment policy exposure to international markets, the Plan used the proceeds from exiting the Vontobel Fund in March 2016 to invest in a passive vehicle that accesses international markets. This fund invests in equity securities located primarily outside the United States and will seek to replicate the MSCI Emerging Markets Equity Index in performance. This fund is classified in Level 2 of the fair value hierarchy since the price of the fund is derived from the holdings in the fund which are all actively quoted in active markets. The fund prices its asset value daily and provides very short-term liquidity. The Plan exited this index fund in October 2016 to place the assets with an actively managed fund AllianceBernstein EM Strategic Core Equity.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

*Fair Value of Equity Securities—Continued*

INTERNATIONAL, CONTINUED

*Wasatch Emerging Markets Small Capitalization Fund*—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.

*Vontobel Global Emerging Markets Fund*—The Plan invests in a global emerging markets fund managed by Vontobel. This fund invests primarily in non-U.S. emerging market equity securities around the globe. The Vontobel fund is a commingled investment fund for institutional investors. The fund is classified in Level 2 of the fair value hierarchy, as the holdings of the fund are priced at quoted market prices in active markets. The fund prices on a monthly basis and offers investors monthly liquidity with 15 days prior notice. Due to a change in the management of this fund, the Plan exited the Vontobel fund on March 31, 2016.

*Fair Value of Private Equity*—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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

*Fair Value of Private Equity—Continued*

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, 2017, the Plan was invested in 63 different private equity strategies (7 of which were in real estate PE) and had remaining commitments of \$177 million for the non-real estate PE partnerships and \$31 million for the real estate PE partnerships. The Plan entered into 6 new private equity partnership agreements during fiscal year 2017 (5 non-real estate PE partnerships and 1 real estate PE partnership), each having an average contract maturity of 10 years. These new PE investments will require total commitments of \$63 million for the non-real estate partnerships and \$10 million for the real estate partnership.

The Plan had commitments of \$135 million remaining at June 30, 2017, to PE partnership investments entered into prior to 2017, 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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

*Fair Value of Private Equity—Continued*

At June 30, 2016, the Plan was invested in 64 different PE (6 of which were real estate PE) partnerships and had a remaining commitment of \$159 million for the non-real estate PE partnerships, and \$27 million for the real estate PE partnerships. The Plan entered in to 8 new private equity partnership agreements during fiscal year 2016 (7 non-real estate PE partnerships and 1 real estate PE partnership), each having an average contract maturity of 10 years (with the exception of 1 that has a 5-year maturity). These new PE investments will require total commitments of \$88 million for the non-real estate partnerships and \$15 million for the real estate partnership.

The Plan had commitments of \$84 million remaining at June 30, 2016, to PE partnership investments entered into prior to 2016, with an estimated maturity between 2 to 9 years.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

*Fair Value of Private Equity—Continued*

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.

**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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**Investments Measured at Fair Value, Continued**

*Fair Value of Private Equity—Continued*

The Plan is invested with four 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, 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. The Realty 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. Hall Capital Partners values investments in the fund on an income approach rather than base valuations on cyclical appraisals.

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

*Low-Volatility Hedge Fund—PAAMCO*—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.

*Wellington Global Total Return (GTR) Fund*—The Plan invested in Wellington's Global Total Return Fund in fiscal 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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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

**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*—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. Grosvenor does not have primary investment discretion over the Class B shares. 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. Recent additions to the Class B fund subject to lockup were \$13 million on June 1, 2015, and \$13 million on March 30, 2016.

*Core Real Estate—JP Morgan Strategic Property and Blackstone Property Partners*—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 *once per quarter subject to "available cash" as determined by a pool trustee with 45 days' advance* 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 will expire on December 31, 2017.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(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.

**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, 2017 and 2016, there were no foreign currency gains and no remeasurement losses.

**(5) DERIVATIVES AND OTHER INSTRUMENTS**

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, 2017 or 2016. 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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(5) DERIVATIVES AND OTHER INSTRUMENTS, CONTINUED**

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 mortgagees, 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) INVESTMENT IN BUILDING**

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, 2017 and 2016, was estimated at approximately \$4.25 million and \$4.1 million, respectively.

**(7) CAPITAL ASSETS**

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, 2016</u>	<u>Additions</u>	<u>Disposals</u>	Balance at <u>June 30, 2017</u>
Cost	\$ 1,014,045	-	-	1,014,045
Accumulated amortization	<u>(1,014,045)</u>	<u>-</u>	<u>-</u>	<u>(1,014,045)</u>
Capital assets, net	<u>\$ -</u>	<u>-</u>	<u>-</u>	<u>-</u>
	Balance at <u>June 30, 2015</u>	<u>Additions</u>	<u>Disposals</u>	Balance at <u>June 30, 2016</u>
Cost	\$ 1,014,045	-	-	1,014,045
Accumulated amortization	<u>(912,640)</u>	<u>(101,405)</u>	<u>-</u>	<u>(1,014,045)</u>
Capital assets, net	<u>\$ 101,405</u>	<u>(101,405)</u>	<u>-</u>	<u>-</u>

See Independent Auditors' Report.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

**(8) DEFERRED OPTION BENEFITS**

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:

	2017			
	<u>Deferred Option</u>	<u>"Back" DROP</u>	<u>Payout Provision</u>	<u>Total</u>
	<i>(Amounts in Thousands)</i>			
Beginning balance	\$ 2,630	2,201	3,391	8,222
Employer contributions	81	2,082	-	2,163
Member contributions	-	2,561	-	2,561
Deferred benefits	668	17,974	-	18,642
Payments	(1,874)	(26,903)	(1,983)	(30,760)
Interest	198	5,171	185	5,554
Ending balance	<u>\$ 1,703</u>	<u>3,086</u>	<u>1,593</u>	<u>6,382</u>
	2016			
	<u>Deferred Option</u>	<u>"Back" DROP</u>	<u>Payout Provision</u>	<u>Total</u>
	<i>(Amounts in Thousands)</i>			
Beginning balance	\$ 3,646	3,762	3,580	10,988
Employer contributions	108	2,003	-	2,111
Member contributions	-	2,466	-	2,466
Plan reassignments	-	(1,590)	1,590	-
Deferred benefits	892	17,864	-	18,756
Payments	(2,266)	(27,811)	(1,749)	(31,826)
Interest	250	5,507	(30)	5,727
Ending balance	<u>\$ 2,630</u>	<u>2,201</u>	<u>3,391</u>	<u>8,222</u>

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(9) NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS**

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

	<u>2017</u>	<u>2016</u>
	<i>(Amounts in Thousands)</i>	
Total pension liability	\$ 2,403,073	2,354,815
Plan fiduciary net position	<u>2,395,381</u>	<u>2,201,671</u>
Employers' net pension liability	<u>\$ 7,692</u>	<u>153,144</u>
Plan fiduciary net position as a percentage of the total pension liability	<u>99.68%</u>	<u>93.50%</u>

*Actuarial assumptions*—The total pension liability was determined by an actuarial valuation as of July 1, 2017 and 2016, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Inflation:	3%
Salary increases:	4.5% to 17% 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.
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.

The actuarial assumptions used in the July 1, 2017 and 2016, valuations were based on the results of an actuarial experience study for the period July 2007 to June 2012.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(9) NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS, CONTINUED**

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 inflation factor added back was 2.26% for both 2017 and 2016. 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:

<u>Asset Class</u>	<u>Long-Term Expected Real Rate of Return</u>	
	<u>2017</u>	<u>2016</u>
	(includes inflation factor)	
Fixed income	4.51%	5.53%
Domestic equity	6.62%	7.42%
International equity	9.70%	9.74%
Real estate	6.96%	7.23%
Private equity	9.86%	10.58%
Commodities	5.18%	4.68%

*Discount rate*—The discount rate used to measure the total pension liability was 7.5% for 2017 and 2016. 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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

**(9) NET PENSION LIABILITY OF PARTICIPATING EMPLOYERS, CONTINUED**

*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:

<u>2017</u>	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
<i>(Amounts in Thousands)</i>			
Employers' net pension liability (asset)	\$ 259,969	7,692	(205,394)
<hr/>			
<u>2016</u>	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
<i>(Amounts in Thousands)</i>			
Employers' net pension liability (asset)	\$ 401,800	153,144	(56,808)

**(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.

**(11) FEDERAL INCOME TAX STATUS**

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.

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

**NOTES TO FINANCIAL STATEMENTS, CONTINUED**

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**(12) HISTORICAL INFORMATION**

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) LEGISLATIVE AMENDMENTS**

The following is a summary of significant plan provision changes that were enacted by the Oklahoma Legislature during 2017 and 2016:

2017

- House Bill 1119—Updates the rules for distributions to include rollover contributions for SIMPLE IRAs that are structured and timed in accordance with the IRS's SIMPLE IRA regulations. Authorizes the Board to obtain records from the Council on Law Enforcement Education and Training to verify any person's eligibility for membership in the System. Authorizes the Board to audit participating member municipalities to ensure compliance with the System's statutes and rules, including, but not limited to, compensation used to determine a member's paid base salary.

2016

- House Bill 2273—Amends the computation of final average salary to be based specifically on paid base salary in which required contributions have been made. Amends and clarifies the definition of paid base salary, including its components and exclusions. Adds additional language regarding the purchase of transferred credited service to comply with IRS rules regarding the use of Roth and non-Roth type accounts.

**(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.

**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 LIABILITY****Last 9 Fiscal Years (Dollar Amounts in Thousands)**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
<b>Total pension liability</b>									
Service cost	\$ 63,029	58,695	54,592	53,042	56,160	54,059	66,974	65,756	62,139
Interest	171,306	165,076	164,141	159,256	150,394	144,742	174,238	169,827	161,028
Changes of benefit terms	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(41,985)	596	(12,764)	(18,258)	7,194	(10,069)	(96,100)	(38,037)	(7,660)
Changes in assumptions	-	-	-	-	(2,444)	-	(422,901) *	-	-
Benefit payments, including refunds of member contributions	<u>(144,092)</u>	<u>(138,625)</u>	<u>(141,693)</u>	<u>(119,241)</u>	<u>(114,835)</u>	<u>(113,300)</u>	<u>(104,044)</u>	<u>(110,427)</u>	<u>(94,114)</u>
Net change in total pension liability	48,258	85,742	64,276	74,799	96,469	75,432	(381,833)	87,119	121,393
Total pension liability—beginning	<u>2,354,815</u>	<u>2,269,073</u>	<u>2,204,797</u>	<u>2,129,998</u>	<u>2,033,529</u>	<u>1,958,097</u>	<u>2,339,930</u>	<u>2,252,811</u>	<u>2,131,418</u>
Total pension liability—ending (a)	<u>\$ 2,403,073</u>	<u>2,354,815</u>	<u>2,269,073</u>	<u>2,204,797</u>	<u>2,129,998</u>	<u>2,033,529</u>	<u>1,958,097</u>	<u>2,339,930</u>	<u>2,252,811</u>

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

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

(Continued)

See Independent Auditors' Report.  
See accompanying notes to required supplementary information.

**Exhibit I, Continued**

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

**SCHEDULE OF CHANGES IN EMPLOYERS' NET PENSION LIABILITY, CONTINUED****Last 9 Fiscal Years (Dollar Amounts in Thousands)**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
<b>Plan fiduciary net position</b>									
Contributions—employers (cities)	\$ 38,887	38,533	37,261	35,547	34,645	32,896	31,846	32,240	31,675
Contributions—members	23,916	23,787	22,867	22,131	21,518	20,113	19,489	19,626	19,139
Contributions—State of Oklahoma, a non-employer contributing entity	34,283	35,915	35,490	31,329	31,412	28,092	24,645	22,292	26,913
Net investment income (loss)	242,415	(21,104)	74,554	294,897	221,174	8,374	282,305	163,058	(283,519)
Benefit payments, including refunds of member contributions	(144,092)	(138,625)	(141,693)	(119,241)	(114,835)	(113,300)	(104,044)	(110,427)	(94,114)
Administrative expense	(1,699)	(1,831)	(1,949)	(1,862)	(2,053)	(1,952)	(1,712)	(1,708)	(2,176)
Net change in plan fiduciary net position	193,710	(63,325)	26,530	262,801	191,861	(25,777)	252,529	125,081	(302,082)
Plan fiduciary net position—beginning	<u>2,201,671</u>	<u>2,264,996</u>	<u>2,238,466</u>	<u>1,975,665</u>	<u>1,783,804</u>	<u>1,809,581</u>	<u>1,557,052</u>	<u>1,431,971</u>	<u>1,734,053</u>
Plan fiduciary net position—ending (b)	<u>\$ 2,395,381</u>	<u>2,201,671</u>	<u>2,264,996</u>	<u>2,238,466</u>	<u>1,975,665</u>	<u>1,783,804</u>	<u>1,809,581</u>	<u>1,557,052</u>	<u>1,431,971</u>
Plan's net pension liability (asset) (a) - (b)	<u>\$ 7,692</u>	<u>153,144</u>	<u>4,077</u>	<u>(33,669)</u>	<u>154,333</u>	<u>249,725</u>	<u>148,516</u>	<u>782,878</u>	<u>820,840</u>

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

See Independent Auditors' Report.

See accompanying notes to required supplementary information.

**Exhibit II**

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

**SCHEDULE OF EMPLOYERS' NET PENSION LIABILITY**

**Last 9 Fiscal Years (Dollar Amounts in Thousands)**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Total pension liability	\$ 2,403,073	2,354,815	2,269,073	2,204,797	2,129,998	2,033,529	1,958,097	2,339,930	2,252,811
Plan fiduciary net position	<u>2,395,381</u>	<u>2,201,671</u>	<u>2,264,996</u>	<u>2,238,466</u>	<u>1,975,665</u>	<u>1,783,804</u>	<u>1,809,581</u>	<u>1,557,052</u>	<u>1,431,971</u>
Plan's net pension liability (asset)	<u>\$ 7,692</u>	<u>153,144</u>	<u>4,077</u>	<u>(33,669)</u>	<u>154,333</u>	<u>249,725</u>	<u>148,516</u>	<u>782,878</u>	<u>820,840</u>
Plan fiduciary net position as a percentage of the total pension liability	<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>	<u>66.54%</u>	<u>63.56%</u>
Covered payroll	<u>\$ 299,131</u>	<u>296,408</u>	<u>295,307</u>	<u>289,502</u>	<u>279,014</u>	<u>266,038</u>	<u>257,505</u>	<u>249,583</u>	<u>253,956</u>
Plan's net pension liability (asset) as a percentage of covered payroll	<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>	<u>313.67%</u>	<u>323.22%</u>

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

See Independent Auditors' Report.  
See accompanying notes to required supplementary information.

**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 Thousands*)**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>
Actuarially determined contribution	\$ 51,417	45,054	63,908	90,283	79,314	64,746	146,816	132,456	102,610	100,561
Contributions in relation to the actuarially determined contribution:										
Employers (Cities)	38,887	38,533	37,261	35,547	34,645	32,896	31,846	32,240	31,675	30,061
State of Oklahoma, a non-employer contributing entity	34,283	35,915	35,490	31,329	31,412	28,092	24,645	22,292	26,913	26,020
	<u>73,170</u>	<u>74,448</u>	<u>72,751</u>	<u>66,876</u>	<u>66,057</u>	<u>60,988</u>	<u>56,491</u>	<u>54,532</u>	<u>58,588</u>	<u>56,081</u>
Contribution (excess) deficiency	\$ <u>(21,753)</u>	<u>(29,394)</u>	<u>(8,843)</u>	<u>23,407</u>	<u>13,257</u>	<u>3,758</u>	<u>90,325</u>	<u>77,924</u>	<u>44,022</u>	<u>44,480</u>
Covered payroll	\$ <u>299,131</u>	<u>296,408</u>	<u>295,307</u>	<u>289,502</u>	<u>279,014</u>	<u>266,038</u>	<u>257,505</u>	<u>249,583</u>	<u>253,956</u>	<u>239,805</u>
Contributions as a percentage of covered payroll	<u>24.46%</u>	<u>25.12%</u>	<u>24.64%</u>	<u>23.10%</u>	<u>23.68%</u>	<u>22.92%</u>	<u>21.94%</u>	<u>21.85%</u>	<u>23.07%</u>	<u>23.39%</u>

See Independent Auditors' Report.

See accompanying notes to required supplementary information.

**Exhibit IV**

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

**SCHEDULE OF INVESTMENT RETURNS****Last 5 Fiscal Years**

	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Annual money-weighted rate of return, net of investment expense	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.

See accompanying notes to required supplementary information.

**Exhibit V**

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

**NOTES TO REQUIRED SUPPLEMENTARY INFORMATION****June 30, 2017**

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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 2017 and 2016, and by Buck Consultants, LLC for all other years presented) at the dates indicated. Additional information as of the July 1, 2017, valuation follows:

**Assumptions**

Actuarial cost method:	Entry age
Amortization method:	Level dollar—open
Remaining amortization:	5 years
Asset valuation method:	5-year smoothed

**Actuarial assumptions:**

Investment rate of return:	7.5%, net
Projected salary increases*:	4.5% to 17%
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.

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\* Includes inflation at 3%.

See Independent Auditors' Report.

**SUPPLEMENTARY INFORMATION**

## Schedule I

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

**SCHEDULE OF INVESTMENT EXPENSES**

<i>Years Ended June 30,</i>	<i>2017</i>	<i>2016</i>
	<i>(Amounts in Thousands)</i>	
Investment management fees:		
Fixed income managers:		
Global Fixed Income	\$ 1,283	1,098
Low Volatility	1,208	1,649
Equity managers:		
Domestic Equity	2,805	2,561
International Equity	2,314	1,757
Private Equity	2,591	2,394
Real estate:		
Real estate	2,741	2,338
Commodities	658	664
Total investment management fees	13,600	12,461
Investment consultant fees	650	650
Investment custodial fees	205	191
Total investment expenses	\$ 14,455	13,302

See Independent Auditors' Report.

## Schedule II

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

**SCHEDULE OF ADMINISTRATIVE EXPENSES**

<i>Years Ended June 30,</i>	<i>2017</i>	<i>2016</i>
	<i>(Amounts in Thousands)</i>	
Staff salaries	\$ 852	778
FICA and retirement	225	185
Insurance	136	122
Total personnel services	<u>1,213</u>	<u>1,085</u>
Actuarial	43	59
Audit	62	66
Legal	70	201
Total professional/consultant services	<u>175</u>	<u>326</u>
Office space and equipment	93	89
Total rental	<u>93</u>	<u>89</u>
Travel	48	36
Maintenance	78	77
Depreciation	-	101
Computer/data	11	7
Other	81	110
Total miscellaneous	<u>218</u>	<u>331</u>
Total administrative expenses	<u>\$ 1,699</u>	<u>1,831</u>

See Independent Auditors' Report.

## Schedule III

## OKLAHOMA POLICE PENSION AND RETIREMENT PLAN

Administered by

## OKLAHOMA POLICE PENSION AND RETIREMENT SYSTEM

**SCHEDULE OF PROFESSIONAL/CONSULTANT FEES**

<u>Years Ended June 30,</u>	<u>2017</u>	<u>2016</u>
	<i>(Amounts in Thousands)</i>	
<u>Professional/Consultant</u>	<u>Service</u>	
Buck Consultants	\$ -	59
Cavanaugh MacDonald Consulting	43	-
Finley & Cook, PLLC	62	66
Davis, Graham, Stubbs, LLP	55	186
Attorney General	<u>15</u>	<u>15</u>
	<u>\$ 175</u>	<u>326</u>

See Independent Auditors' Report.



## Investment Section

- 83 – Investment Consultant Letter
- 86 – Schedule of Largest Assets Held
- 87 – Investment Portfolio by Type and Manager
- 88 – Schedule of Private Equity Managers
- 89 – Net Performance Summary
- 90 – Asset Allocation - Portfolio versus Policy Comparison
- 90 - Schedule of Investment Fees
- 91 - Schedule of Broker Commissions



Investment Section



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## REPORT ON INVESTMENT ACTIVITIES

October 16, 2017

Asset Consulting Group works with the Oklahoma Police Pension & Retirement System's Board to maintain an Investment Policy and asset allocation strategy that are designed to meet the long term objectives of OPPRS. 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.

The Oklahoma Police Pension and Retirement System's investment portfolio has been constructed with an emphasis on risk mitigation and a goal of achieving favorable long term risk-adjusted returns. Because of the strength of the Retirement System's funded status, special attention is given to reduced volatility, downside protection, and attention to liquidity needs. For the fiscal year ending June 30, 2017, the OPPRS' portfolio generated a gross investment return of 11.56%, in line with the policy benchmark return of 11.78%. Over the three year period ending June 30, 2017, the total portfolio has produced an annualized return of 4.95% relative to a return of 4.02% for its policy benchmark. For the recent 10-year period ending June 30, 2017, the OPPRS' portfolio has generated an annualized return of 5.03% versus 4.99% for its benchmark. The OPPRS' portfolio has achieved its results over each of these time periods with approximately 20% less volatility than that of its benchmark, and has produced superior risk-adjusted returns. The risk conscious approach adopted by OPPRS over the long term has resulted in a more favorable risk-adjusted return profile than its median peer and benchmark, and is influenced by the overall health of the Retirement System's assets relative to its liabilities. 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, 2017

	OPPRS	Total Fund Policy
Return	5.03%	5.00%
Standard Deviation	8.06%	10.58%
Sharpe Ratio	0.57	0.43

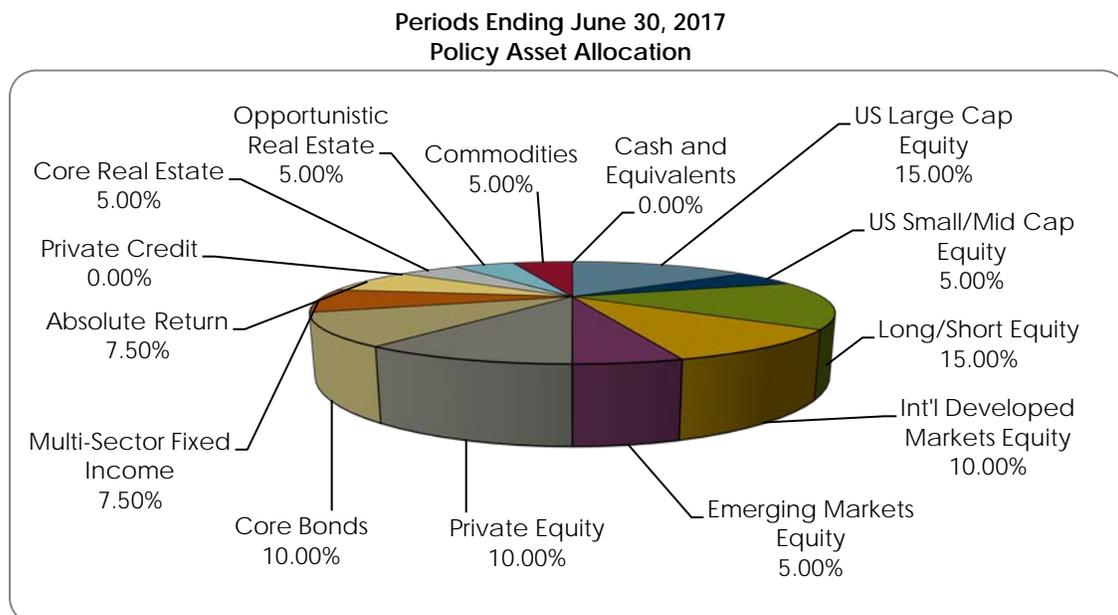
The major asset category returns are also summarized as follows:

**Total Portfolio Rates of Return Summary & Universe Rankings**  
*Periods Ending June 30, 2017*

	10 Years
<b>Total Fund</b>	<b>5.03%</b>
<i>Policy Index<sup>1</sup></i>	5.00%
<i>Median Total Fund (55-70% Equity)</i>	5.39%
<b>Total Equity Composite</b>	<b>5.18%</b>
<i>MSCI ACWI</i>	4.27%
<b>Global Bonds Composite</b>	<b>4.72%</b>
<i>BloomBar Universal</i>	4.73%
<i>BloomBar Aggregate</i>	4.48%
<b>Real Assets Composite</b>	<b>3.94%</b>
<i>NFI ODCE Net</i>	4.29%

<sup>1</sup>As of 04-30-16      The index consists of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 10.0% NFI ODCE Net, 5.0% BloomBar Commodity

The OPPRS investment strategy has been developed and periodically reviewed and modified following thorough analysis of many alternatives evaluated and the current investment opportunity set. The strategy is refined as appropriate to ensure compatibility with the expected long-term return objectives, unique considerations of OPPRS and the Board’s risk tolerance. The primary objective of this approach is to implement a plan of action which will result in the highest probability of meeting long term investment objectives within an acceptable level of risk. 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, 2017 the OPPRS targeted asset allocation consisted of:



In summary, ACG believes that OPPRS has adopted and implemented a sound Investment Policy and portfolio strategy, recognizing its healthy funded status in designing a portfolio structured to achieve strong risk-adjusted returns while maintaining a protective stance against significant asset loss.

Sincerely,

A handwritten signature in black ink that reads "George A. Tarlas". The signature is written in a cursive, flowing style.

George A. Tarlas, CFA  
Senior Managing Director

## Schedule of Largest Assets Held For the Fiscal Year Ended June 30, 2017

The Plan's ten largest stock, fixed income and partnership holdings at June 30, 2017.

### Largest Stock Holdings (by Fair Value)

Security	Shares Held	Fair Value
COHERENT INC	11,717	\$ 2,636,208
WORLD FUEL SERVICES CORP	58,946	2,266,474
BMC STOCK HOLDINGS INC	83,128	1,816,346
LCI INDUSTRIES	17,716	1,814,118
ARROW ELECTRONICS INC	22,400	1,756,608
AIR LEASE CORP	45,820	1,711,835
K2M GROUP HOLDINGS INC	68,048	1,657,649
WALKER & DUNLOP INC	33,480	1,634,828
NAVIENT CORP	97,625	1,625,456
ON SEMICONDUCTOR CORP	112,644	1,581,522

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

Security	Par Value	Fair Value
U.S. Treasury Bond	8,920,000	\$ 11,732,555
GNMA II Pool #OMA0783	5,746,131	5,976,953
US Treasury Note	4,465,000	4,498,488
FNMA POOL #OAS6830	4,518,850	4,409,100
FHLMC POOL #G0-8653	4,315,575	4,213,850
FHLMC POOL #CO-4444	3,102,166	3,012,400
FNMA POOL #OAB2092	2,412,140	2,561,986
FHLMC POOL #G0-8741	2,511,362	2,544,077
FNMA POOL #OAS5596	2,471,921	2,488,544
FNMA POOL #OAH3394	2,289,688	2,261,430

### Largest Limited Partnership Holdings (by Fair Value)

Limited Partnership	Fair Value
FirstMark Capital I	\$ 20,570,987
LBC Credit Partners IV	10,101,103
Weathergage Venture Capital II	9,863,103
Newstone III	8,832,593
Warburg Pincus X	8,028,865
Warburg Pincus XI	7,918,286
Sun Capital V	7,896,435
Arsenal III	7,791,781
Knightsbridge Venture Capital VI	7,707,743
FirstMark Capital II	7,349,031

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, 2017

Investment Managers by Investment Type	Investment Class	Fair Value (000s)	% of Asset Class (boxed)	% of Total Portfolio
<b>International Equity</b>				
Baring Focused	Equity	\$ 112,010	7.5%	4.7%
Mondrian International Equity Fund, LP	Equity	131,552	8.8%	5.5%
AllianceBernstein EM Strategic Core	Equity	78,872	5.3%	3.3%
Wasatch Small Cap	Equity	33,772	2.3%	1.4%
<b>Domestic Equity</b>				
<b>Small/Mid Cap</b>				
Common Stock - Custodial account	Equity	183	0.0%	0.0%
Boston Partners - Value	Equity	108,372	7.3%	4.5%
Cortina - Growth	Equity	81,555	5.5%	3.4%
<b>Large Cap</b>				
Northern Trust Index Russell 1000	Equity	412,054	27.6%	17.3%
<b>Long/Short Equity</b>				
Grosvenor A	Equity	189,452	12.7%	7.9%
Grosvenor B	Equity	146,174	9.8%	6.1%
<b>Private Equity</b>				
Various Managers *	Equity	199,559 (*)	13.4%	8.4%
<b>Global Fixed Income</b>				
Agincourt- Core	Fixed Income	166,642	29.4%	7.0%
Oaktree Capital Management	Fixed Income	119,301	21.0%	5.0%
Loomis Sayles	Fixed Income	94,897	16.7%	4.0%
<b>Low Volatility Strategies</b>				
PAAMCO - Newport Mesa	Fixed Income	126,868	22.4%	5.3%
Wellington Global Total Return	Fixed Income	59,877	10.5%	2.5%
<b>Real Assets</b>				
MLM Macro - Peak Partners L.P.	Commodities	29,569	10.2%	1.2%
The TAP Fund/Gresham	Commodities	47,297	16.2%	2.0%
JP Morgan Core Real Estate	Core RE	115,903	39.8%	4.9%
Blackstone Core Real Estate	Core RE	37,824	13.0%	1.6%
Cerberus Fund III	Opportunistic	15,794	5.4%	0.7%
Cerberus Fund IV	Opportunistic	861	0.3%	0.0%
Columbus Square - Direct Ownership	Opportunistic	4,250	1.5%	0.2%
Siguler Guff - Opportunistic	Opportunistic	7,236	2.5%	0.3%
Siguler Guff II- Opportunistic	Opportunistic	7,734	2.7%	0.3%
Hall Capital III	Opportunistic	7,269	2.5%	0.3%
TA Associates Realty X - Opportunistic	Opportunistic	17,370	6.0%	0.7%
<b>Cash and Cash Equivalents</b>				
OK Invest	Cash & Cash Eq.	7,936	24.2%	0.3%
Cash at BNY Mellon	Cash & Cash Eq.	24,796	75.8%	1.0%
Total Investments and Cash and Cash Equivalents		\$ 2,384,979		100.0%

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

## Private Equity by Strategy and Manager For the Period Ended June 30, 2017

Investment Focus and Manager	Market Value
<b>Private Equity Investment Focus - Buyout</b>	
Apollo Investment Fund VIII	\$ 5,193,879
Arsenal Capital Partners Fund II, L.P.	6,254,708
Arsenal Capital Partners Fund III, L.P.	7,791,781
Calera Capital Fund III	39,067
Calera Capital Fund IV	1,319,691
CenterOak Equity I	1,520,347
Francisco Partners Fund IV	5,678,906
Leonard Green Equity Investors VII	725,596
Levine Leichtman Capital Partners III, L.P.	1,382,488
Levine Leichtman Capital Partners IV, L.P.	2,699,134
Sun Capital Fund V	7,896,435
Thompson Street Capital Partners II GP, LP	2,352,010
Thompson Street Capital Partners III GP, LP	4,077,301
Thompson Street Capital Partners VI GP, LP	3,481,153
Subtotal - Buyout	50,412,496
<b>Private Equity Investment Focus - Distressed</b>	
Oaktree Opportunity Fund III	893
Oaktree Opportunity Fund IV	1,912
Oaktree Opportunity Fund V	93,490
Oaktree Opportunity Fund VI	953
Oaktree Opportunity Fund VII	677,972
Oaktree Opportunity Fund VIIb	563,028
Oaktree Opportunity Fund VIII	1,947,229
Oaktree Opportunity Fund IX	6,855,652
Oaktree Opportunity Fund X	2,968,020
Oaktree European Dislocation	1,244,202
Siguler Guff Distressed Opportunity Fund II	926,799
Siguler Guff Distressed Opportunity Fund III	3,922,068
Subtotal - Distressed	19,202,218
<b>Private Equity Investment Focus - Fund of Funds</b>	
Lexington Cap VI-B	4,302,082
Subtotal - Fund of Funds	4,302,082
<b>Private Equity Investment Focus - Mezzanine</b>	
LBC Credit Partners Fund IV	10,101,103
Newstone Capital Partners I, LP	434,154
Newstone Capital Partners II, LP	3,136,940
Newstone Capital Partners III, LP	8,832,593
TCW/Crescent Mezzanine III, L.P.	324,580
TCW/Crescent Mezzanine IV, L.P.	94,081
TCW/Crescent Mezzanine V, L.P.	1,272,319
Subtotal - Mezzanine	24,195,770
<b>Private Equity Investment Focus - Venture Capital</b>	
Accel Europe, L.P.	2,638,093
FirstMark Cap Opportunity Fund I	3,322,673
FirstMark Capital Fund I	20,570,987
FirstMark Capital Fund II	7,349,031
FirstMark Capital Fund IV	254,793
FirstMark Venture Fund III	4,415,457
KnightsBridge	7,707,743
Lightspeed Venture Partner Fund VI, L.P.	410,116
Venture Lending & Leasing III, LLC	103,455
Warburg Pincus X	8,028,865
Warburg Pincus XI	7,918,286
Warburg Pincus XII	3,082,671
Weathergage Capital	6,540,043
Weathergage Capital II	9,863,103
Weathergage Capital IV	747,262
Subtotal - Venture Capital	82,952,578
<b>Private Equity Investment Focus - Emerging Markets</b>	
Actis 4 Global	5,361,000
Subtotal - Emerging Markets	5,361,000
<b>Private Equity Investment Focus - Other</b>	
ArLight Energy Vi	4,359,987
EnCap Energy Fund IX	5,532,324
EnCap Energy Fund X	3,240,117
Subtotal - Other	13,132,428
<b>Total Private Equity Investments</b>	<b>\$ 199,558,572</b>

### 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 OPRRS) 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 will usually be concentrated within a specific industry or region.

## Net Performance Summary by Investment Manager For the Period Ended June 30, 2017

Investment Managers by Investment Type	Investment Performance*			
	One Quarter	One Year	Three Years	Five Years
<b>International Equity</b>				
Baring Focused	7.51%	21.54%	5.42%	8.16%
Mondrian	4.26%	16.37%	0.63%	8.58%
MSCI EAFE	6.37%	20.83%	1.61%	9.18%
AllianceBernstein EM Strategic Core	5.70%	19.68%	N/A	N/A
MSCI Emerging markets	6.38%	24.17%	1.44%	4.33%
Wasatch Emerging Markets - Small Cap	9.12%	13.72%	1.93%	N/A
MSCI Emerging Markets Small Cap	2.69%	17.34%	1.10%	5.46%
<b>Domestic Equity Managers</b>				
<b>Small/Mid Capitalization Equity</b>				
Boston Partners - Value	2.18%	25.81%	7.96%	15.31%
Russell 2500 Value	0.32%	18.36%	6.21%	13.69%
Cortina- Growth	5.59%	32.67%	7.77%	N/A
Russell 2000 Growth	4.39%	24.40%	7.64%	13.98%
<b>Large Capitalization Equity</b>				
Northern Trust Russell 1000 Index Fund	3.05%	18.02%	9.27%	14.65%
Russell 1000	3.06%	18.03%	9.26%	14.67%
<b>Long/Short Equity</b>				
Grosvenor	2.15%	11.45%	4.57%	7.59%
MSCI ACWI	4.45%	19.42%	5.39%	11.14%
HFRI FOF Strategic	1.42%	9.13%	1.76%	4.51%
<b>Private Equity</b>				
	1.23%	5.47%	8.74%	10.00%
<b>Global Fixed Income Managers</b>				
Agincourt- Core Bonds	1.65%	0.44%	2.86%	2.80%
Oaktree Capital Management	2.19%	11.88%	4.26%	6.90%
BloomBar US Aggregate	1.45%	-0.31%	2.48%	2.21%
Loomis Sayles	3.31%	-0.71%	-0.14%	1.15%
Citigroup World Gov't Bond	2.89%	-4.14%	-1.00%	-0.20%
<b>Low Volatility Strategies Managers</b>				
PAAMCO - Newport Mesa	0.81%	6.62%	0.10%	5.03%
HFRI FOF Conservative	0.71%	5.50%	1.55%	6.38%
Wellington Global Total Return	0.25%	N/A	N/A	N/A
LIBOR 3 Month	0.28%	0.93%	0.55%	0.44%
<b>Real Assets</b>				
MLM Macro - Peak Partners L.P. (Commodities)	-1.10%	0.81%	7.08%	7.21%
Gresham Tap Fund (Commodities)	-3.17%	-5.33%	N/A	N/A
Bloomberg Commodity	-3.00%	-6.50%	-14.81%	-9.25%
Private Real Estate (Opportunistic)	3.34%	9.04%	12.17%	10.60%
Columbus Square (Opportunistic-Plan owned)	4.83%	9.12%	10.67%	9.48%
Blackstone Property Partners (Core RE)	2.67%	11.79%	N/A	N/A
JP Morgan (Core RE)	1.57%	7.94%	10.78%	12.15%
NFI ODCE(net)	0.00%	5.35%	9.79%	10.44%
<b>Cash and Cash Equivalents</b>				
OK Invest	0.46%	2.00%	1.92%	2.01%
Cash at BNY Mellon ^	0.15%	2.73%	2.03%	1.47%
<b>Total Portfolio</b>	<b>2.64%</b>	<b>11.56%</b>	<b>4.95%</b>	<b>8.52%</b>
<b>Total Portfolio Net of Fees</b>	<b>2.54%</b>	<b>11.14%</b>	<b>4.52%</b>	<b>8.08%</b>
<i>Policy Index (1)</i>	<i>2.89%</i>	<i>11.78%</i>	<i>4.02%</i>	<i>8.01%</i>

Source: Asset Consulting Group, Report June 30, 2016. All returns based on investment industry standards for return calculations.

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

^ - Cash with custodian includes miscellaneous equity securities in process of liquidation.

(1) The Total Fund Policy Index History (by effective date of change)

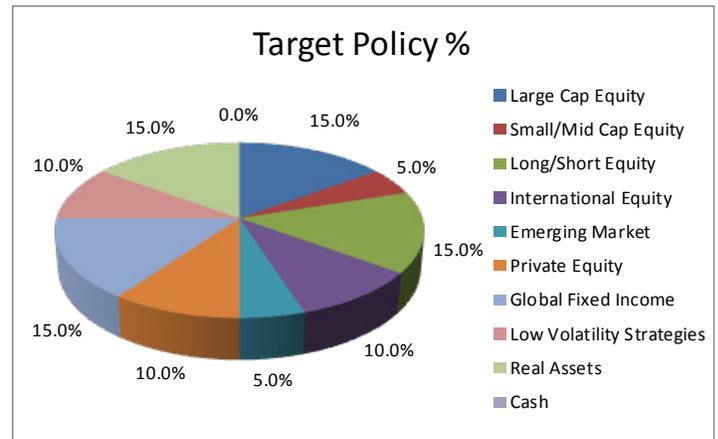
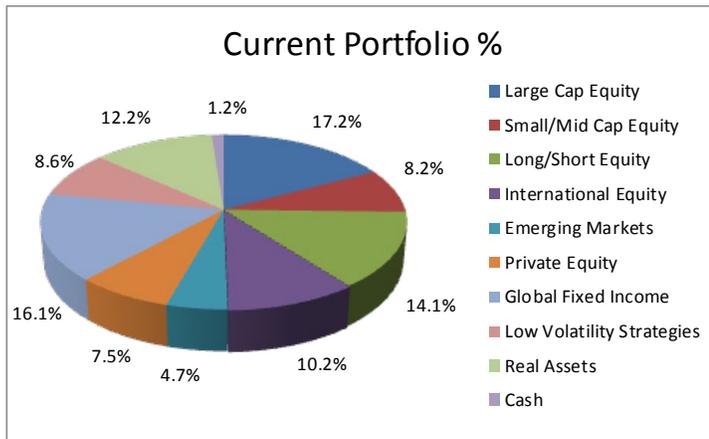
08/2012 - The policy index consisted of 65.0% MSCI ACWI, 30.0% Barclays Universal, 5.0% NFI ODCE Net

08/2014 - The policy index consisted of 60.0% MSCI ACWI, 30.0% Barclays Universal, 5.0% NFI ODCE Net, 5.0% Bloomberg Commodity

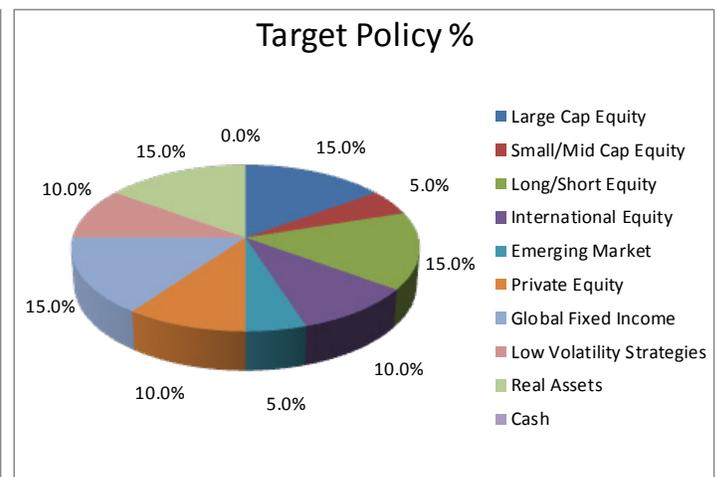
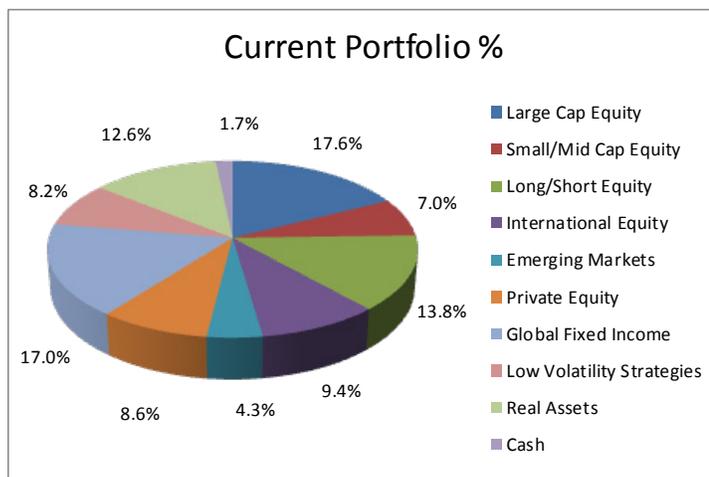
04/2016 - The policy index consisted of 60.0% MSCI ACWI, 25.0% BloomBar Universal, 10.0% NFI ODCE Net, 5.0% Bloomberg Commodity

## Current Portfolio versus Target Policy Allocation For the Fiscal Years Ended June 30, 2017 and June 30, 2016

### Period Ending June 30, 2017



### Period Ending June 30, 2016



## Schedule of Investment Fees For the Fiscal Years Ended June 30, 2017 and 2016

Investment Managers Fees	2017	2016
Domestic Equity	\$ 2,805,000	\$ 2,561,000
Private Equity	2,591,000	2,394,000
International Equity	2,314,000	1,757,000
Real Estate	2,741,000	2,338,000
Commodities	658,000	664,000
Fixed Income-Low Volatility	1,208,000	1,649,000
Fixed Income	1,283,000	1,098,000
Subtotal - Investment Managers Fees	13,600,000	12,461,000
Custodian fee	205,000	191,000
Investment Consultant fee	650,000	650,000
Total Investment Management Fees	\$ 14,455,000	\$ 13,302,000

## Schedule of Broker Commissions

### For the Fiscal Year Ended June 30, 2017

Schedule of Broker Commissions				
Broker Name\Location	Base Commission	Base amount Traded	Units Traded	Commission per Share
BAIRD, ROBERT W & CO INC, MILWAUKEE	\$8,737	\$5,850,681	198,080	0.04411
BARCLAYS CAPITAL INC./LE, NEW JERSEY	2,355	2,141,721	102,692	0.02293
BB&T SECURITIES, LLC, RICHMOND	774	346,502	19,345	0.04000
BERNSTEIN SANFORD C & CO, NEW YORK	5,755	9,731,073	338,550	0.01700
BMO CAPITAL MARKETS CORP, NEW YORK	719	414,687	20,424	0.03518
BNY CONVERGEX, NEW YORK	565	349,922	16,426	0.03440
CANTOR CLEARING SERV, NEW YORK	1,261	1,317,981	50,135	0.02515
CANTOR FITZGERALD & CO INC, NEW YORK	4,495	1,967,135	154,348	0.02912
CITIGROUP GBL MKTS INC, NEW YORK	1,184	584,794	39,460	0.03000
CREDIT SUISSE, NEW YORK (CSUS)	3,676	3,786,522	167,183	0.02199
DAVIDSON(D A) & CO INC, NEW YORK	4,150	2,879,998	111,171	0.03733
DEUTSCHE BK SECS INC, NY (NWSCUS33)	1,556	963,381	46,326	0.03358
GOLDMAN SACHS & CO, NY	12,039	7,206,898	457,747	0.02630
GOLDMAN SACHS EXECUTION & CLEARING, NY	7,109	10,826,134	426,917	0.01665
ICBC FINCL SVCS, NEW YORK	1,994	903,979	54,981	0.03626
ITG INC, NEW YORK	281	849,318	40,091	0.00700
J.P. MORGAN CLEARING CORP, NEW YORK	14,291	12,105,179	577,008	0.02477
JEFFERIES & CO INC, NEW YORK	9,948	4,460,840	275,430	0.03612
KING (CL) & ASSOCIATES, ALBANY	1,164	313,877	29,109	0.04000
KNIGHT CLEARING SERVICES LLC, JERSEY CIT	863	250,810	25,614	0.03370
MACQUARIE CAPITAL (USA) INC., NEW YORK	2,814	1,776,270	73,851	0.03810
MERRILL LYNCH PIERCE FENNER SMITH INC NY	31,779	16,151,960	1,173,632	0.02708
MERRILL LYNCH PROFESSIONAL CLRG, PURCHAS	706	437,271	21,058	0.03353
MORGAN STANLEY & CO INC, NY	828	605,495	37,206	0.02225
NATIONAL FINL SVCS CORP, NEW YORK	31,090	16,286,214	959,088	0.03242
OPPENHEIMER & CO INC, NEW YORK	3,617	2,605,359	114,802	0.03151
PERSHING LLC, JERSEY CITY	46,434	25,507,644	1,478,756	0.03140
PIPER JAFFRAY & CO, MINNEAPOLIS	17,762	8,775,955	414,076	0.04290
RAYMOND JAMES & ASSOC INC, ST PETERSBURG	7,819	3,393,427	201,093	0.03888
RBC CAPITAL MARKETS LLC, NEW YORK	8,810	4,385,342	314,927	0.02797
STATE STREET GLOBAL MARKETS LLC, BOSTON	1,873	1,213,703	64,395	0.02909
STEPHENS INC, LITTLE ROCK	10,513	5,727,180	283,115	0.03713
STIFEL NICOLAUS	7,843	3,957,703	274,794	0.02854
UBS SECURITIES LLC, STAMFORD	3,708	5,384,696	215,336	0.01722
WEDBUSH MORGAN SECS INC, LOS ANGELES	2,061	1,138,920	73,017	0.02822
WELLS FARGO SECURITIES LLC, CHARLOTTE	4,781	2,853,146	136,198	0.03511
WILLIAM BLAIR & CO, CHICAGO	6,599	3,855,029	190,225	0.03469
TOTALS	\$271,953	\$171,306,746	9,176,606	0.02964



## Actuarial Section

- 94 - Actuarial Certification Letter
- 96 - Summary of Actuarial Valuation Results
- 97 - Schedule of Active Member Data
- 97 - Schedule of Retirants Added \ Removed from Rolls
- 97 - Schedule of Funding Progress (Actuarial)
- 98 - Solvency Test
- 99 - Analysis of Financial Experience
- 100 - Summary of Actuarial Assumptions and Methods
- 105 - Summary of System Provisions



Actuarial Section



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September 28, 2017

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, 2017 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, 2017.

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. We also prepared the *Schedule of Funding Progress* and *Schedule of Employer Contributions* shown in the financial section of the Comprehensive Annual Financial Report. All historical information that references a valuation date prior to July 1, 2016 was prepared by the prior actuarial firm.

The assumptions recommended by the prior actuary 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 Bryan Hoge, 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. 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 Banister, PhD, FSA, EA, FCA, MAAA  
Chief Pension Actuary



Bryan K. Hoge, FSA, EA, FCA, MAAA  
Senior 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 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, 2017

	Actuarial Valuation as of		
	July 1, 2017	July 1, 2016	% Change
<b>Summary of Costs</b>			
Required State Contributions for Current Year	\$ -	\$ 10,642,000	(100.00) %
Actual State Contributions Received in Prior Year	34,283,000	35,915,000	(4.54)
<b>Funded Status</b>			
Actuarial Accrued Liability	\$ 2,403,073,000	\$ 2,354,815,000	2.05 %
Actuarial Value of Assets	2,447,351,000	2,323,407,000	5.33
Unfunded Actuarial Accrued Liability	(44,278,000)	31,408,000	(240.98)
Funded Ratio	101.8%	98.7%	3.22
<b>Market Value of Assets and Additional Liabilities</b>			
Market Value of Assets	\$ 2,395,381,000	\$ 2,201,671,000	8.80 %
Actuarial Present Value of Accumulated System Benefits (ASC 960)	2,287,633,000	2,235,297,000	2.34
Present Value of Projected System Future Benefits	2,977,220,000	2,931,205,000	1.57
<b>Summary of Data</b>			
<b>Number of Members in Valuation</b>			
Active Paid Members (vested and not vested)	4,695	4,679	0.34 %
Deferred Option Plan Members	14	19	(26.32)
Terminated Members with Refunds Due	721	669	7.77
Terminated Members with Deferred Benefits	132	132	-
Retired Members	2,769	2,683	3.21
Beneficiaries	748	727	2.89
Disabled Members	141	140	0.71
<b>Total</b>	<b>9,220</b>	<b>9,049</b>	<b>1.89</b>
<b>Active Member Statistics</b>			
Total Annual Compensation	\$ 313,087,696	\$ 312,751,104	0.11 %
Average Compensation	\$ 66,685	\$ 66,841	(0.23)
Average Age	40.0	39.8	0.50
Average Service	12.0	11.9	0.84

## Schedule of Active Member Valuation Data

Valuation Date July 1,	Number of Members	Annual Payroll	Average Annual Payroll	Percentage Change in Average Payroll
2008	4,453	239,804,959	53,852	3.54%
2009	4,497	253,955,863	56,472	4.87%
2010	4,305	249,582,676	57,975	2.66%
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%

## Schedule of Retirants and Beneficiaries Added to and Removed from the Annuity Rolls

Fiscal Year Ended June 30,	Added to Rolls		Removed from Rolls		Rolls at Year End		Percentage Increase	Average Annual Benefits
	Number of Additions	Annual Benefits	Number of Removals	Annual Benefits	Year End Roll Count	Annual Benefits		
2008	138	6,784,790	69	1,740,133	2,719	77,628,890	7.0%	28,551
2009	125	4,465,126	59	1,644,802	2,785	80,449,214	3.6%	28,887
2010	259*	8,245,373	51	1,619,770	2,993	87,074,817	8.2%	29,093
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

\* - Total headcount increased by 97 as a result of QDRO's (Qualified Domestic Relation Orders) being reported as a separate record.

## Schedule of Funding Progress

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)
7/1/2008	1,752,169,000	2,132,175,698	380,006,698	82.2%	239,804,959	158.5%
7/1/2009	1,717,566,000	2,253,133,775	535,567,775	76.2%	253,955,863	210.9%
7/1/2010	1,754,372,000	2,341,619,152	587,247,152	74.9%	249,582,676	235.3%
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%

## 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 Accrued Liability and Valuation Assets (in thousands)				Reported Reported Assets *	Portion of Accrued Liabilities Covered by Assets			Funded Ratio of Total Accrued Actuarial Liability
	Active Member Contributions (Liability 1)	Retirees, Beneficiaries and Terminated Vested Members (Liability 2)	Employer Financed Portion of Active Members (Liability 3)	Total Liability (1 + 2 + 3)		(1)	(2)	(3)	
2008	155,139	998,667	978,370	2,132,176	1,752,169	100%	100%	61.2%	82.2%
2009	166,888	1,045,726	1,040,520	2,253,134	1,717,566	100%	100%	48.5%	76.2%
2010	174,026	1,111,075	1,056,518	2,341,619	1,754,372	100%	100%	44.4%	74.9%
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%

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

## Analysis of Financial Experience

As of July 1, 2017

<b>1. Expected Actuarial Accrued Liability</b>	
a. Actuarial Accrued Liability at July 1, 2016	\$ 2,354,815,000
b. Normal Cost and Expenses for Plan Year Ended June 30, 2017	58,632,000
c. Benefit Payments and Expenses for Plan Year Ending June 30, 2017	(144,092,000)
d. Change in Actuary	-
e. Interest on (a), (b), (c) and (d)	175,703,000
f. Change in Actuarial Accrued Liability at July 1, 2017 due to changes in Actuarial Assumptions	-
g. Change in Actuarial Accrued Liability at July 1, 2017 due to changes in System Provisions	-
h. Expected Actuarial Accrued Liability at July 1, 2017	<u>2,445,058,000</u>
<b>2. Actuarial Accrued Liability at July 1, 2017</b>	<b><u>2,403,073,000</u></b>
<b>3. Actuarial Liability Gain/(Loss) (1h. - 2)</b>	<b>41,985,000</b>
<b>4. Expected Actuarial Value of Assets</b>	
a. Actuarial Value of Assets at July 1, 2016	2,323,407,000
b. Contributions Made for Plan Year Ending June 30, 2017	97,086,000
c. Benefit Payments and Expenses for Plan Year Ending June 30, 2017	(145,791,000)
d. Interest on (a + b - c) to End of Year	<u>172,462,000</u>
e. Expected Actuarial Value of Assets at July 1, 2017	<u>2,447,164,000</u>
<b>5. Actuarial Value of Assets at July 1, 2016</b>	<b><u>2,447,351,000</u></b>
<b>6. Actuarial Asset Gain/(Loss) (5 - 4e.)</b>	<b>187,000</b>
<b>7. Actuarial Gain/(Loss) (3 + 6)</b>	<b>42,172,000</b>

The actuarial gain/(loss) is comprised of both the liability gain/(loss) and the actuarial asset gain/(loss). Each of these represents the difference between the expected and actual values as of July 1, 2017.

## 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.

### Valuation Procedures

The wages used in the projection of benefits and liabilities are pay for the year ending June 30, 2017 (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 with a beneficiary if a spouse date of birth was provided on the data. Members whose data did not have a spouse's date of birth were assumed to be single.

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*.

No additional liability is being carried for the guaranteed minimum interest rate for the Deferred Option Plan account balances.

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. Investment Return 7.5%, net of investment expenses, per annum, compound annually.
2. Salary Scale Sample rates are shown below:

Attained Service	Inflation %	Merit %	Increase %
0	3.00	14.00	17.00
1	3.00	10.00	13.00
2	3.00	6.30	9.30
3	3.00	5.90	8.90
4	3.00	5.50	8.50
5	3.00	5.10	8.10
6	3.00	4.70	7.70
7	3.00	4.30	7.30
8	3.00	3.90	6.90
9	3.00	3.50	6.50
10	3.00	3.15	6.15
15	3.00	1.70	4.70
20	3.00	1.50	4.50

**Demographic Assumptions**

1. Retirement Rates Sample rates are shown below:

Attained Service	Annual Rates of Retirement
20	20%
21	6
22	6
23	6
24	10
25	20
26	10
27	10
28	10
29	15
30	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 (post-retirement) and nondisabled pensioners

RP-2000 Combined Blue Collar Healthy Employees with Generational Projection

(c) Disabled pensioners

RP-2000 Combined Blue Collar Healthy Combined with age set back four years

### 3. Disability Rates

Sample rates are shown below:

Age	Rate
20-24	.0002
25-29	.0002
30-34	.0004
35-39	.0006
40-44	.0008
45-49	.0010
50-54	.0012
55-59	.0014

### 4. Withdrawal Rates

Sample rates are shown below:

Service Range	Rate
0	.200
1	.130
2	.080
3	.060
4	.060
5-10	.040
11-15	.015
16-20	.010
Over 20	.000

### 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 25%-49% 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  $\frac{1}{3}$  to  $\frac{1}{2}$  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%.
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 7.75% (to reflect the interest rate guarantee prior to retirement) 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.

## Summary of System Provisions

<b>Effective Date and Plan Year:</b>	The System became effective July 1, 1981 and has been amended each year since then. The plan year is July 1 to July 30.
<b>Administration:</b>	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.
<b>Plan Type:</b>	Defined benefit plan.
<b>Employers Included:</b>	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.
<b>Eligibility:</b>	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.
<b>Salary Considered:</b>	<p>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.</p> <p>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.</p>
<b>Service Considered:</b>	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.
<b>State Contributions:</b>	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.
<b>Member Contributions:</b>	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.
<b>Municipality Contributions:</b>	Contribution is 13% percent 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 date the Member would have had 20 years of service in an amount equal to 2 1/2% of the greater of final average salary or the salary paid to active employees as described under “salary considered” multiplied by the 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.

% Impairment	% of Benefit
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.

1% to 24%	25%
25% to 49%	50%
50% to 74%	75%
75% to 99%	90%

**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:** 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:** 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 Plan, 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

- 111 - Statistical Narrative
- 112 - Schedule of Changes in Net Position (& Graph)
- 113 - Schedule of Revenue by Source
- 113 - Schedule of Expenses by Type
- 114 - Schedule of Benefits & Refunds by Type
- 114 - Funded Ratio (Graph)
- 115 - Schedule of Investment Returns by Type (& Graph)
- 116 - Schedule of Retired Members by Benefit Type
- 117 - Schedule of Average Benefit Payments
- 118 - Schedule of Principal Participating Employers
- 119 - Schedule of Participating Employers
- 120 - Membership Statistics Data



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.

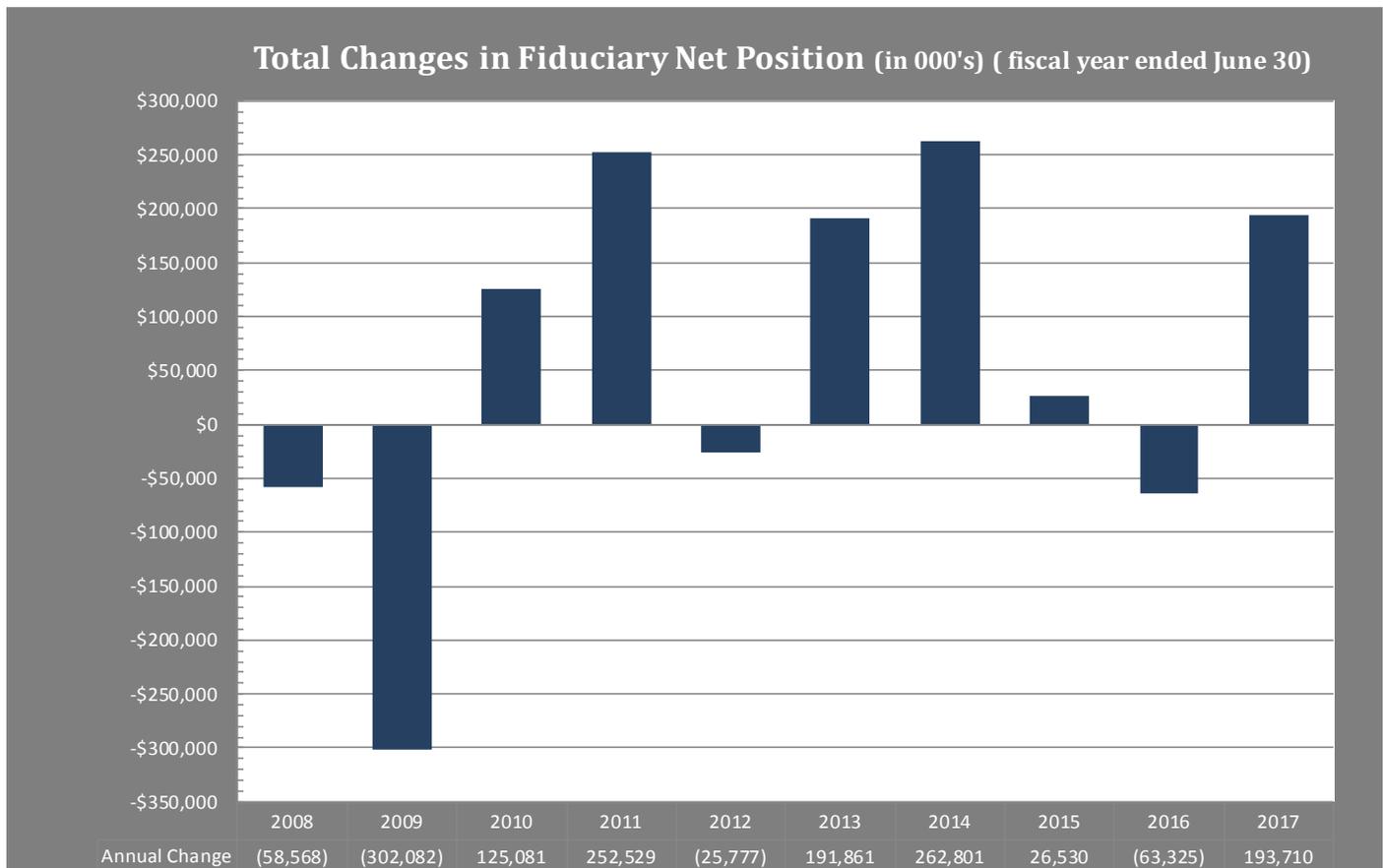
## Schedule of Changes in Fiduciary Net Position (in Thousands)

Fiscal Year Ended June 30,	Additions				Deductions				Total Changes in Fiduciary Net Position
	Member Contributions	Employer Contributions	Insurance Premium Tax	Net Investment Income (Loss)	Benefit Payments *	Deferred Option Payments**	Refund of Contributions	Administrative Expenses	
2008	17,997	30,061	26,020	(43,387)	75,178	10,046	1,031	3,004	(58,568)
2009	19,139	31,675	26,913	(283,519)	80,238	12,726	1,150	2,176	(302,082)
2010	19,626	32,240	22,292	163,058	82,799	26,208	1,420	1,708	125,081
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

Total Cumulative Change in Net Position for the Last 10 Years \$ 602,760

\* - Benefit Payments include survivor and death benefit payments.

\*\* - Deferred Option Payments include the Deferred Option and back DROP plans.



## 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
2008	17,997	30,061	26,020	(43,387)	30,691
2009	19,139	31,675	26,913	(283,519)	(205,792)
2010	19,626	32,240	22,292	163,058	237,216
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

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

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

## Schedule of Expenses by Type (in Thousands)

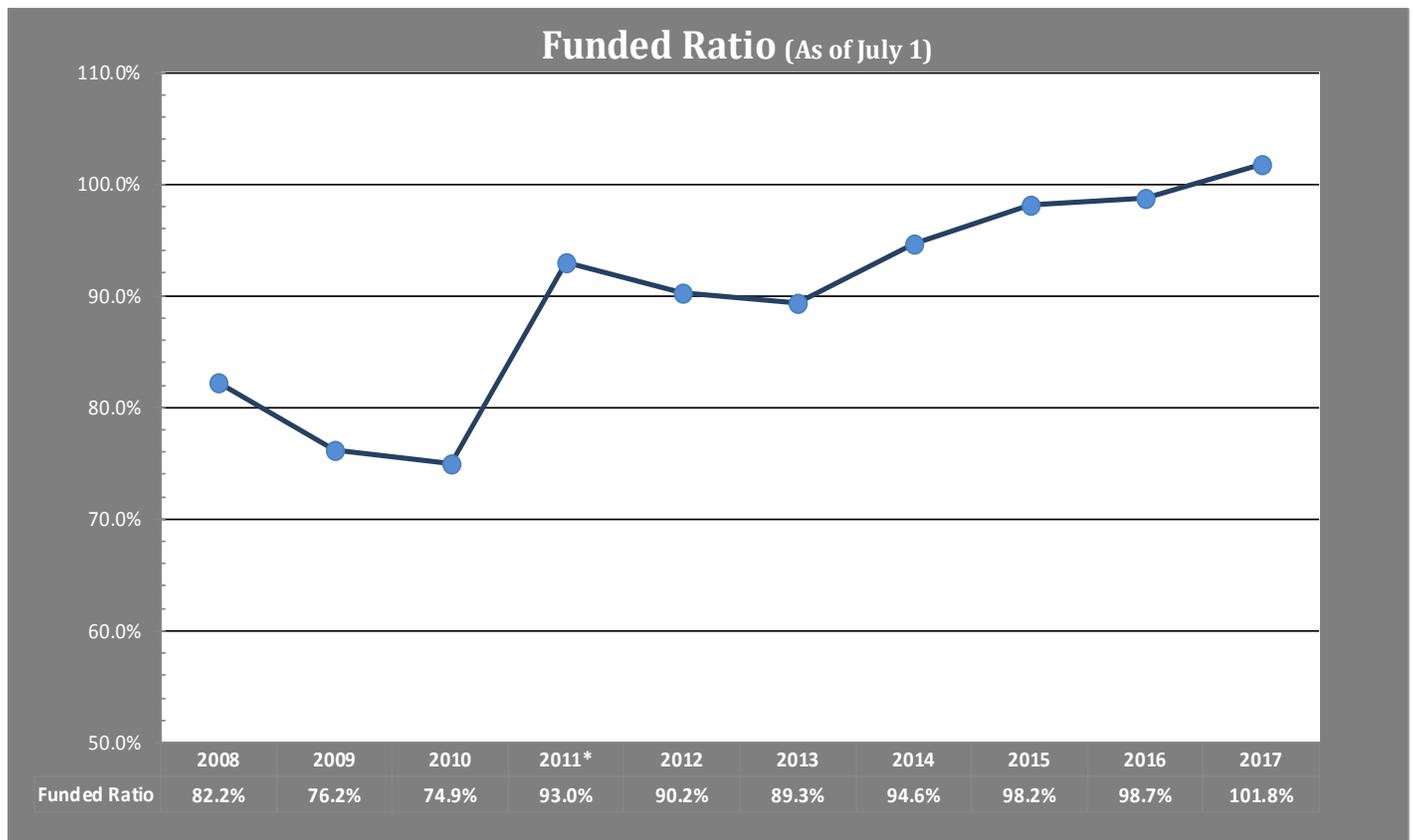
Fiscal Year Ended June 30,	Pension Benefits	Death Benefits	Deferred Option Benefits	Refunds	Administrative Expenses	Total
2008	74,988	190	10,046	1,031	3,004	89,259
2009	79,988	250	12,726	1,150	2,176	96,290
2010	82,639	160	26,208	1,420	1,708	112,135
2011	86,638	205	15,084	2,117	1,712	105,756
2012	89,451	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

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

Fiscal Year Ended June 30,	Benefit Payments by Type				Deferred Option Benefits*	Refunds		Total Benefit Payments and Refunds
	Service Retirement	Beneficiaries	Disabled	Death Benefit		Withdrawal	Member Death	
2008	58,885	13,606	2,497	190	10,046	1,028	3	86,255
2009	62,943	14,608	2,437	250	12,726	1,113	37	94,114
2010	64,425	15,855	2,359	160	26,208	1,381	39	110,427
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

\* - 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)

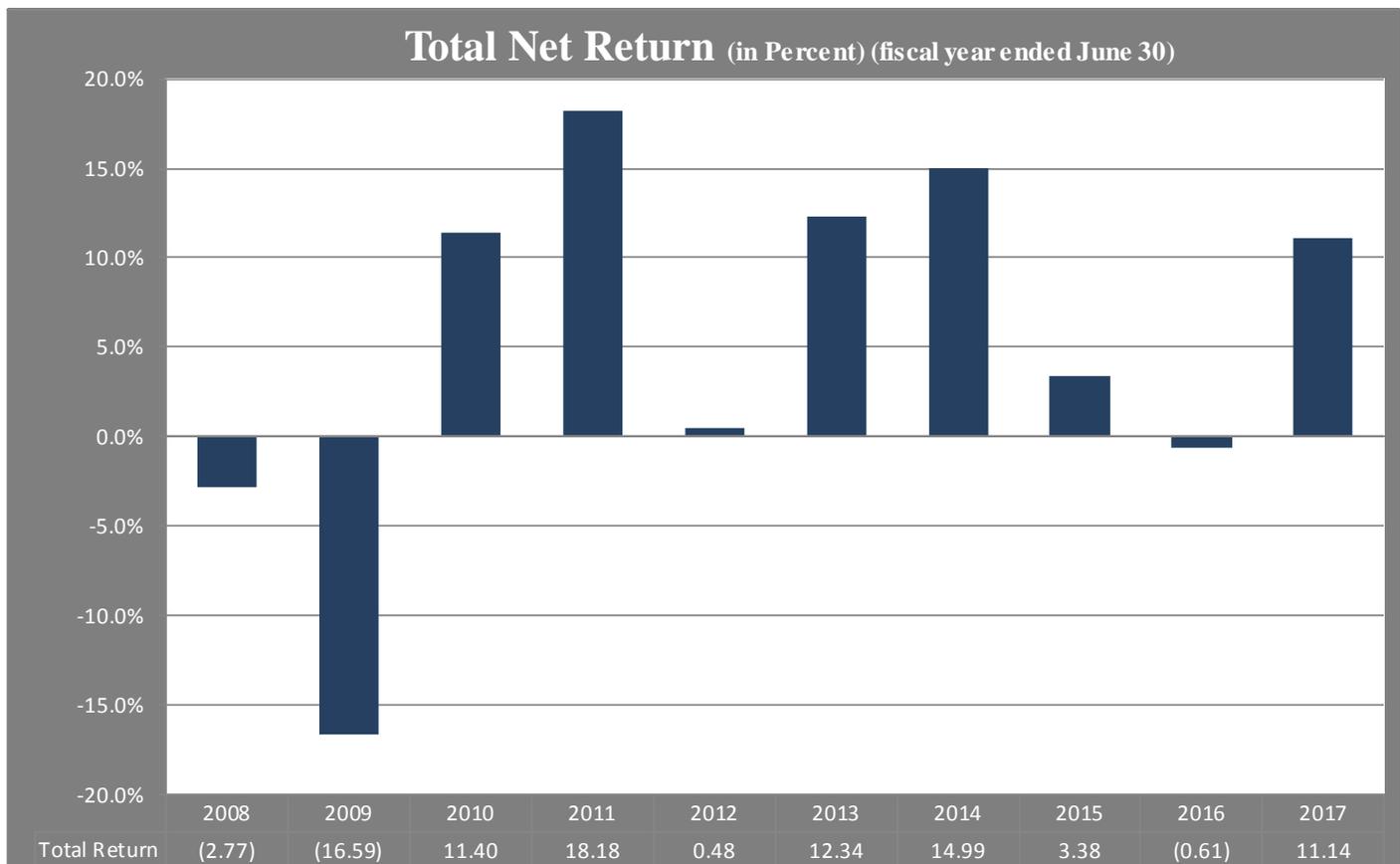


\* - Beginning in 2011, funded ratio calculations do not include Cost-of-Living-Adjustments (COLA's) due to legislation requiring all ad-hoc COLA's be prefunded by the Oklahoma Legislature.

## 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)
2008	(12.80)	(7.80)	8.71	11.40	23.95	(2.77)
2009	(17.06)	(32.27)	(3.36)	(22.09)	(15.55)	(16.59)
2010	9.50	6.42	17.01	8.80	(3.90)	11.40
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

## Total Annual Return (Net, in Percent)



## Schedule of Retired Members by Type of Benefit For the Fiscal Year Ended June 30, 2017

Monthly Benefit Amount	Number of Retirees and Beneficiaries	Number of Retirees and Beneficiaries by Type of Retirement*						
		1	2	3	4	5	6	7
\$ 0 - 1,000	248	17	58	104	46	7	13	3
1,001 - 1,500	309	39	56	26	32	4	145	7
1,501 - 2,000	517	84	30	10	18	5	354	16
2,001 - 2,500	752	127	14	5	9	2	582	13
2,501 - 3,000	689	94	3	1	5	3	579	4
3,001 - 3,500	513	85	2	0	6	1	414	5
3,501 - 4,000	339	69	0	0	3	0	262	5
4,001 - 4,500	134	24	0	0	0	0	110	0
4,501 - 5,000	75	7	0	0	0	0	68	0
5,001 - 5,500	33	3	0	0	0	0	30	0
5,501 - 6,000	25	0	0	0	0	0	25	0
6,001 - 6,500	8	0	0	0	0	0	8	0
6,501 - 7,000	4	0	0	0	0	0	4	0
7,001 - 7,500	3	0	0	0	0	0	3	0
7,501 - 8,000	0	0	0	0	0	0	0	0
8,001 - 8,500	1	0	0	0	0	0	1	0
8,501 - 9,000	1	0	0	0	0	0	1	0
Totals:	3,651	549	163	146	119	22	2,599	53

### \* 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

Retirement Effective Dates (Note A) July 1, 2007 to June 30, 2017	Years of Credited Service*				
	10-15	15-20	20-25	25-30	30+
<b>Period 07/01/07 to 06/30/08</b>					
Average Monthly Benefit	\$ 662	\$ 1,897	\$ 2,234	\$ 3,427	\$ 3,352
Average Final Average Salary	\$ 2,058	\$ 4,272	\$ 4,216	\$ 5,090	\$ 4,469
Number of Retired Members	1	5	61	20	2
<b>Period 07/01/08 to 06/30/09</b>					
Average Monthly Benefit	\$ -	\$ 2,012	\$ 2,347	\$ 3,517	\$ 4,071
Average Final Average Salary	\$ -	\$ 4,392	\$ 4,449	\$ 5,223	\$ 5,429
Number of Retired Members	0	6	52	14	8
<b>Period 07/01/09 to 06/30/10</b>					
Average Monthly Benefit	\$ 1,628	\$ 2,170	\$ 2,499	\$ 3,513	\$ 4,261
Average Final Average Salary	\$ 4,449	\$ 5,083	\$ 4,736	\$ 5,062	\$ 5,682
Number of Retired Members	1	2	83	24	11
<b>Period 07/01/10 to 06/30/11</b>					
Average Monthly Benefit	\$ -	\$ 1,662	\$ 2,761	\$ 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
<b>Period 07/01/11 to 06/30/12</b>					
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
<b>Period 07/01/12 to 06/30/13</b>					
Average Monthly Benefit	\$ -	\$ -	\$ 2,721	\$ 3,891	\$ 4,880
Average Final Average Salary	\$ -	\$ -	\$ 5,187	\$ 5,674	\$ 6,507
Number of Retired Members	0	0	79	16	11
<b>Period 07/01/13 to 06/30/14</b>					
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
<b>Period 07/01/14 to 06/30/15</b>					
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
<b>Period 07/01/15 to 06/30/16</b>					
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	4	72	21	20
<b>Period 07/01/16 to 06/30/17</b>					
Average Monthly Benefit	\$ 855	\$ 2,136	\$ 3,088	\$ 3,808	\$ 4,696
Average Final Average Salary	\$ 3,323	\$ 4,970	\$ 5,784	\$ 5,528	\$ 6,262
Number of Retired Members	2	8	78	21	14

Note A - Schedule includes service retirements as of July 1, 2014 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.

\* - 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

10 Largest Participating Cities\Municipalities\Towns	Fiscal Year 2017			Fiscal Year 2008		
	Covered Members	Rank	% of Total Covered Members	Covered Members	Rank	% of Total Covered Members
Oklahoma City	1067	1	22.73%	1054	1	23.73%
Tulsa	761	2	16.21%	816	2	18.37%
Lawton	180	3	3.83%	159	3	3.58%
Norman	164	4	3.49%	135	4	3.04%
Broken Arrow	135	5	2.88%	117	5	2.63%
Edmond	114	6	2.43%	110	6	2.48%
Enid	94	7	2.00%	88	8	1.98%
Midwest City	89	8	1.90%	91	7	2.05%
Moore	88	9	1.87%	74	10	1.67%
Muskogee	86	10	1.83%	88	9	1.98%
Total-10 Largest Employers	2778		59.17%	2732		61.52%
All Other Cities\Towns	1917		40.83%	1709		38.48%
Total Covered Members	4695		100.00%	4441		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, 2017

Oklahoma State Agencies (3)		
ABLE Commission	Bureau of Narcotics	OK State Bureau of Investigation
Oklahoma Cities, Municipalities and Towns (138)		
Ada	Frederick	Owasso
Altus	Garber	Pauls Valley
Alva	Glenpool	Pawhuska
Anadarko	Grandfield	Perkins
Arapaho	Granite	Perry
Ardmore	Grove	Piedmont
Atoka	Guthrie	Ponca City
Bartlesville	Guymon	Poteau
Bethany	Harrah	Prague
Bixby	Haskell	Pryor
Blackwell	Henryetta	Purcell
Blair	Hinton	Ringling
Blanchard	Hobart	Sallisaw
Boynton	Hominy	Sand Springs
Bristow	Hugo	Sapulpa
Broken Arrow	Idabel	Savanna
Catoosa	Jenks	Sawyer
Chandler	Jones	Sayre
Checotah	Kingfisher	Seminole
Chickasha	Krebs	Shawnee
Choctaw	Lamont	Skiatook
Chouteau	Lawton	Spencer
Claremore	Lexington	Stigler
Cleveland	Lindsay	Stillwater
Clinton	Luther	Sulphur
Collinsville	Madill	Tahlequah
Comanche	Mangum	Tecumseh
Commerce	Mannford	The Village
Coweta	Marlow	Tishomingo
Cromwell	McAlester	Tonkawa
Cushing	Miami	Tulsa
Davis	Midwest City	Tuttle
Del City	Moore	Valley Brook
Dewey	Muskogee	Vinita
Disney	Mustang	Wagoner
Drummond	Newcastle	Warner
Drumright	Newkirk	Warr Acres
Duncan	Nichols Hills	Watonga
Durant	Nicoma Park	Waurika
Edmond	Noble	Weatherford
El Reno	Norman	Weleetka
Elk City	Nowata	Wetumka
Enid	Okeene	Wewoka
Eufaula	Oklahoma City	Wister
Forest Park	Okmulgee	Woodward
Fort Gibson	Oologah	Yukon

## Membership Statistics Data

Employer and Member Statistics	As of July 1,	2017	2016
Participating Cities, Municipalities and Towns		141	138
Active Members		4,695	4,679
Deferred Option Members		14	19
Terminated Members with Refund Due		721	669
Terminated Members with Deferred Benefits		132	132
Retired Members		2,769	2,683
Beneficiaries Receiving Benefits		748	727
Disabled Members Receiving Benefits		141	140

Active Member Statistics	As of July 1,	2017	2016
Total Annual Compensation (1)		\$ 313,087,696	\$ 312,751,104
Average Compensation(1)		\$ 66,685	\$ 66,841
Average Active Member Age		40.0	39.8
Average Years of Credited Service		12.0	11.9

(1) - Compensation is projected one year based on salary increase assumptions.

Fiscal Year 2017 Refund and Benefit Payment Statistics	Count of Payments Made	Average Amount
Refunds to Terminated Members	179	\$ 10,904
Regular Payments to Service Retirement Members	43,521	\$ 2,533
Payment of Death Benefits to Beneficiaries	48	\$ 5,000
Payments under the Forward DOP	8	\$ 234,199
Payments under the Back DOP	107	\$ 251,430
Payments under the Payout Provision	5	\$ 396,546

