

Teachers' Retirement System of Oklahoma

Financial Report
June 30, 2015

Contents

Independent Auditor's Report	1-2
Management's Discussion and Analysis	3-8
<hr/>	
Financial Statements	
Statements of fiduciary net position	9
Statements of changes in fiduciary net position	10
Notes to financial statements	11-26
<hr/>	
Required Supplementary Information	
Schedule of changes in employers' net pension liability (unaudited)	27
Schedule of employers' net pension liability (unaudited)	28
Schedule of contributions from employers and other contributing entities (unaudited)	29
Schedule of investment returns (unaudited)	30
<hr/>	
Other Supplementary Information	
Schedule of investment expenses	31
Schedule of administrative expenses	32
Schedule of professional/consultant fees	33
<hr/>	
Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With <i>Government Auditing Standards</i>	34-35
<hr/>	
Summary Schedule of Prior Audit Findings	36
Schedule of Reportable Findings	37
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Independent Auditor's Report

Board of Trustees
Teachers' Retirement System of Oklahoma
Oklahoma City, Oklahoma

Report on the Financial Statements

We have audited the accompanying financial statements of the Teachers' Retirement System of Oklahoma (the System), a component unit of the state of Oklahoma, which comprise the statement of fiduciary net position as of June 30, 2015, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America, 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 of material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Teachers' Retirement System of Oklahoma as of June 30, 2015, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Report on Summarized Comparative Information

The financial statements of the System as of and for the year ended June 30, 2014, were audited by other auditors whose report, dated November 10, 2014, expressed an unmodified opinion on those statements. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2014, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the required supplementary information, as listed in the table of contents, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The information included on pages 30 through 32 is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 22, 2015, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 System's internal control over financial reporting and compliance.

RSM US LLP

Oklahoma City, Oklahoma
December 22, 2015

**Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2015 and 2014**

Management is pleased to present this discussion and analysis of the financial activities of the Oklahoma Teachers Retirement System ("OTRS" or the "System") for the years ended June 30, 2015 and 2014. The System is responsible for administering retirement benefits for a 401(a) defined benefit plan for all educational employees of the state of Oklahoma as well as a 403(b) plan which is a tax-advantaged retirement savings plan available for public education organizations. The System was established on July 1, 1943, for the purpose of providing these retirement benefits and other specific benefits for qualified persons employed by public educational institutions. The main purpose of the System is to provide a primary source of lifetime retirement benefits relative to years of service at the time of retirement. It is the objective of the System to provide these benefits in a prudent, responsible, and cost-effective manner. Plan net assets are used to pay current and future benefits to retired clients.

This discussion and analysis is intended to serve as an introduction to the System's basic financial statements. OTRS's basic financial statements are comprised of three components: 1) *statement of fiduciary net position*, 2) *statement of changes in fiduciary net position*, and 3) *notes to the financial statements*. This report also contains *required supplementary information* in addition to the basic financial statements themselves.

The *statement of fiduciary net position* presents information on all of the System's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference between these reported as *net position restricted for pensions*. Over time, increases or decreases in plan net position may serve as a useful indicator of whether the financial position of the System is improving or deteriorating. Information relating to the System's ability to meet the cost of future benefit payments is not shown on the *statement of fiduciary net position* but is located in both the *notes to the financial statements* and the *required supplementary information*.

The *statement of changes in fiduciary net position* presents information showing how the System's net position changed during the most recent fiscal year. Changes in net position are recognized using the accrual basis of accounting, in which expenses are recorded when the liability is incurred and revenues are recorded in the accounting period in which they are earned and become measurable.

The *notes to the financial statements* are critical to the reader's understanding of the financial status of the System. These notes include a description of the System, details on the cash and investments of the System, as well as contribution and benefit information.

The *required supplementary information* presents a Schedule of Changes in Employers' Net Pension Liability, Schedule of Employers' Net Pension Liability, Schedule of Contributions from Employers and Other Contributing Entities and Schedule of Investment Returns. Other supplementary information includes the Schedule of Administrative Expenses, the Schedule of Investment Expenses, and the Schedule of Professional/Consultants Fees. These schedules provide additional analysis of the information provided in the financial statements.

Management's Discussion and Analysis (Continued)
Teachers' Retirement System of Oklahoma
June 30, 2015 and 2014

Condensed Financial Information

Fiduciary net position as of June 30:

	2015	2014	2015 % Change
Assets			
Cash	\$ 95,635,452	\$ 17,695,733	440.4%
Receivables	207,991,357	201,958,789	3.0%
Long- and short-term investments, at fair value	14,635,937,831	14,531,814,990	0.7%
Capital assets, net	3,649,149	2,848,571	28.1%
Total investments and other assets	14,943,213,789	14,754,318,083	1.3%
Securities lending institutional daily assets fund	4,729,952	2,475,662,654	-99.8%
Total assets	14,947,943,741	17,229,980,737	-13.2%
Liabilities			
Investment settlements and other liabilities	299,107,398	314,844,654	-5.0%
Payable under securities lending agreement	4,729,952	2,475,662,654	-99.8%
Total liabilities	303,837,350	2,790,507,308	-89.1%
Net Position			
Net position restricted for pensions	\$ 14,644,106,391	\$ 14,439,473,429	1.4%

Management's Discussion and Analysis (Continued)
Teachers' Retirement System of Oklahoma
June 30, 2015 and 2014

Changes in fiduciary net position for the year ended June 30:

	2015	2014	2015 % Change
Additions:			
Member contributions	\$ 303,677,304	\$ 301,300,811	0.8%
Employer contributions	392,051,458	386,895,127	1.3%
Matching contributions	24,445,212	24,352,831	0.4%
Dedicated tax revenue	311,945,400	295,804,717	5.5%
Member tax shelter contributions	2,823,513	3,026,532	-6.7%
Net investment income gain (loss)	420,630,551	2,587,292,673	-83.7%
Security lending net income	11,832,523	8,590,136	37.7%
Total additions	1,467,405,961	3,607,262,827	-59.3%
Deductions:			
Benefit payments	1,201,350,906	1,153,051,607	4.2%
Refund of member contributions and tax sheltered annuity	57,063,155	50,061,499	14.0%
Administrative expenses	4,358,938	4,282,605	1.8%
Total deductions	1,262,772,999	1,207,395,711	4.6%
Net increase in net position	204,632,962	2,399,867,116	-91.5%
Net Position Restricted for Pensions			
Beginning of year	14,439,473,429	12,039,606,313	19.9%
End of year	\$ 14,644,106,391	\$ 14,439,473,429	1.4%

Management's Discussion and Analysis (Continued)
Teachers' Retirement System of Oklahoma
June 30, 2015 and 2014

Financial Highlights and Analysis

The growth in net position was significantly reduced by a slowdown of the equities market. The total investment returns for fiscal year 2015 were positive 3.5 percent. Domestic and international equity compose 66.6 percent of the investment portfolio asset allocation; domestic equity returned 6.5 percent, while international equity returned -1.7 percent.

	2015	2014
Plan net position	\$ 14,644,106,391	\$ 14,439,473,429
Yearly % change	1.4%	19.9%

The total investment return for the five year period of 13.4 percent is above the actuarial assumed rate of investment return. The continued strengthening of the United States and global markets has driven this rate up since 2009. The assumed actuarial rate of return is currently 8.0 percent.

<u>Total Returns</u>	<u>1 Year</u>	<u>3 Year</u>	<u>5 Year</u>	<u>10 Year</u>
2015	3.5%	14.3%	13.4%	8.3%
2014	22.4%	13.6%	16.1%	9.0%

Benefit payments increased 4.2 percent in 2015 compared to 2014. The increase is a result of a 4.5 percent increase in the number of benefit recipients and a 1.8 percent increase in the average monthly benefit. Benefit payments in 2015 to retired members exceed contributions from contributing members and employers by \$ 204 million, or a ratio of 1.19 to 1. A ratio of less than one would signify that the System is receiving more contributions than it pays out in benefits. While that may be desirable, that would be very rare for a mature defined benefit retirement system. In a mature pension system like OTRS a significant percentage of the benefits are paid out of investment earnings that are not reflected in this ratio. The table on the following page reflects the ongoing employer and member contributions.

	2015	2014
Member contributions	\$ 303,677,304	\$ 301,300,811
Employer contributions	392,051,458	386,895,127
Matching contributions	24,445,212	24,352,831
Dedicated tax revenue	311,945,400	295,804,717
Total contributions	<u>\$ 1,032,119,374</u>	<u>\$ 1,008,353,486</u>
Benefit payments	\$ 1,201,350,907	\$ 1,153,051,607
Refund of contributions	35,240,176	28,718,256
Total payments	<u>\$ 1,236,591,083</u>	<u>\$ 1,181,769,863</u>

Management's Discussion and Analysis (Continued)
Teachers' Retirement System of Oklahoma
June 30, 2015 and 2014

Financial Highlights and Analysis (Continued)

The number of benefit recipients increased 4.5 percent in 2015 as compared to 3.3 percent in 2014. This is comparable to fiscal year 2014. The increase in the number of benefit recipients has remained consistent over the past year. There was a net increase of 2,540 and 1,808 members that entered retirement for fiscal year 2015 and fiscal year 2014, respectively.

	2015	2014
Benefit recipients	58,929	56,389
Yearly % change	4.5%	3.3%
Net increase	2,540	1,808

The following table reflects the average monthly benefit for service retirements. While the table above reflects an increase in the number of retirees in the past year of 4.5 percent the table below reflects the average benefit per retiree has only increased by 1.8 percent in 2015 as compared to 2014. The increase in benefit recipients was 2.7 percent higher than the increase in average benefit payment below.

	2015	2014
Average benefit	\$ 1,627	\$ 1,599
Yearly % change	1.8%	0.5%

The ratio of active members to retired members of the System is 1.54 to 1 in 2015, compared to 1.59 to 1 in 2014. This change is caused by the longevity of the Plan's retiree population and an active population that has leveled off. Contributing members increased by 818 while benefit recipients increased by 2540.

	2015	2014
Members contributing	90,388	89,570
Yearly % change	0.9%	0.3%
Benefit recipients	58,929	56,389
Yearly % change	4.50%	3.30%
Ratio contributing/retired	1.54	1.59

The total pension liability at the close of FY2015 increased 4.60 percent from the prior year. The increase is attributable to a change in actuarial assumptions and a lower return on assets than in FY2014. The ratio of plan fiduciary net position to total pension liability decreased 2.12 percent.

	2015	2014
Total pension liability	\$ 20,551,132,567	\$ 19,646,619,191
Plan fiduciary net position	14,449,506,469	14,229,481,368
Ratio of plan fiduciary net position to total pension liability	70.31%	72.43%

Management's Discussion and Analysis (Continued)
Teachers' Retirement System of Oklahoma
June 30, 2015 and 2014

Financial Highlights and Analysis (Continued)

Under GASB Statement 67 this ratio represents the Total Pension Liability compared to the Plan's total net position at market value. Prior to GASB Statement 67 this ratio was calculated using the actuarial value of the Plan's net position.

Requests for Information

This financial report is designed to provide a general overview of the System's finances for all those with an interest in the System. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Executive Director of the Teachers' Retirement System of Oklahoma, P.O. Box 53524, Oklahoma City, Oklahoma 73152 or (405) 521-2387.

Teachers' Retirement System of Oklahoma

Statements of Fiduciary Net Position

June 30, 2015 (With Comparative Totals as of June 30, 2014)

	401(a) Plan	403(b) Plan	Totals June 30	
			2015	2014
Assets				
Cash	\$ 95,635,452	\$ -	\$ 95,635,452	\$ 17,695,733
Short-term investments	337,034,598	-	337,034,598	432,300,020
Accrued interest and dividends receivable	43,738,698	-	43,738,698	43,053,787
Member contributions receivable	13,755,076	-	13,755,076	17,342,295
Employer contributions receivable	20,486,557	-	20,486,557	26,714,511
Receivable from the State of Oklahoma	29,977,530	-	29,977,530	30,261,548
Due from brokers for securities sold	100,033,496	-	100,033,496	84,586,648
Security lending institutional daily assets fund	4,729,952	-	4,729,952	2,475,662,654
Long-term investments:				
Mutual funds	-	194,599,922	194,599,922	209,992,061
U.S. government securities	797,592,952	-	797,592,952	803,376,179
U.S. corporate bonds	1,963,321,241	-	1,963,321,241	1,915,066,646
International corporate bonds and government securities	103,697,872	-	103,697,872	135,500,052
Equity securities	9,751,823,202	-	9,751,823,202	9,856,801,852
Alternative investments	697,450,822	-	697,450,822	587,418,530
Real estate	790,417,222	-	790,417,222	591,359,650
Total long-term investments	14,104,303,311	194,599,922	14,298,903,233	14,099,514,970
Capital assets, net	3,649,149	-	3,649,149	2,848,571
Total assets	\$ 14,753,343,819	\$ 194,599,922	\$ 14,947,943,741	\$ 17,229,980,737
Liabilities				
Benefits in process of payment	\$ 79,560,652	\$ -	\$ 79,560,652	\$ 75,135,942
Due to brokers for securities purchased	206,832,718	-	206,832,718	226,440,313
Payable under security lending agreement	4,729,952	-	4,729,952	2,475,662,654
Other liabilities	12,714,028	-	12,714,028	13,268,399
Total liabilities	\$ 303,837,350	\$ -	\$ 303,837,350	\$ 2,790,507,308
Net Position				
Net position restricted for pensions	\$ 14,449,506,469	\$ 194,599,922	\$ 14,644,106,391	\$ 14,439,473,429

See Notes to Financial Statements.

Teachers' Retirement System of Oklahoma

Statements of Changes in Fiduciary Net Position

For the Year Ended June 30, 2015 (With Comparative Totals for the Year Ended June 30, 2014)

	401(a) Plan	403(b) Plan	Totals	
			Year Ended June 30	
			2015	2014
Additions:				
Members	\$ 303,677,304	\$ -	\$ 303,677,304	\$ 301,300,811
Members tax shelter	-	2,823,513	2,823,513	3,026,532
Employer statutory requirement from local school districts	392,051,458	-	392,051,458	386,895,127
Matching funds	24,445,212	-	24,445,212	24,352,831
Dedicated tax	311,945,400	-	311,945,400	295,804,717
Total contributions	1,032,119,374	2,823,513	1,034,942,887	1,011,380,018
Investment income:				
Interest and dividends	348,830,547	14,442,936	363,273,483	368,203,834
Net appreciation (depreciation) in fair value of investments	136,013,673	(10,835,609)	125,178,064	2,273,040,729
Investment expenses	(67,820,996)	-	(67,820,996)	(53,951,890)
Gain from investing activities	417,023,224	3,607,327	420,630,551	2,587,292,673
Income (loss) from securities lending activities:				
Securities lending income (loss)	13,920,615	-	13,920,615	10,106,042
Securities lending expenses:				
Management fees	(2,088,092)	-	(2,088,092)	(1,515,906)
Net income (loss) from securities lending activities	11,832,523	-	11,832,523	8,590,136
Net investment gain	428,855,747	3,607,327	432,463,074	2,595,882,809
Total additions	1,460,975,121	6,430,840	1,467,405,961	3,607,262,827
Deductions:				
Retirement, death, survivor and health benefits	1,201,350,906	-	1,201,350,906	1,153,051,607
Refund of member contributions and annuity payments	35,240,176	21,822,979	57,063,155	50,061,499
Administrative expenses	4,358,938	-	4,358,938	4,282,605
Total deductions	1,240,950,020	21,822,979	1,262,772,999	1,207,395,711
Net increase (decrease) in net position	220,025,101	(15,392,139)	204,632,962	2,399,867,116
Net position restricted for pensions:				
Beginning of year	14,229,481,368	209,992,061	14,439,473,429	12,039,606,313
End of year	\$ 14,449,506,469	\$ 194,599,922	\$ 14,644,106,391	\$ 14,439,473,429

See Notes to Financial Statements.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 1. Description of the System

The following brief description of the Teachers' Retirement System of Oklahoma (the "System") is provided for general information purposes only. The plan's benefits are established and amended by State Statute and participants should refer to Title 70 of the Oklahoma Statutes, 1991, Sections 17-101 through 121, as amended.

The System was established as of July 1, 1943 for the purpose of providing retirement allowances and other specified benefits for qualified persons employed by state-supported educational institutions. The System is a part of the state of Oklahoma financial reporting entity, which is combined with other similar funds to comprise the fiduciary-pension trust funds of the state of Oklahoma (the "State"). The System administers a cost-sharing multiple-employer pension plan which is a defined benefit pension plan ("DB Plan"), as well as a tax-deferred defined contribution plan ("DC Plan").

The supervisory authority for the management and operation of the System is a 13-member board of trustees, which acts as a fiduciary for investment of the funds and the application of plan interpretations. The board of trustees is comprised of six appointees from the Governor's Office, two appointees by the Senate Pro Tempore, two appointees by the House Speaker and three Ex Officio positions. Out of the six appointees from the Governor's Office, one must be a Higher Education representative, one is a nonclassified optional personnel, and the remaining four must work in the public or private funds management, banking, law or accounting field. Out of the two Senate Pro Tempore's as well as the House Speaker's appointees, one must be an active classroom teacher while the other be a retired member of Oklahoma Teachers Retirement. The Ex Officio trustees are the State Superintendent, the Office of Management and Enterprise Services Director and the Career-Tech Director or their designee.

DB Plan: Oklahoma teachers and other certified employees of common schools, faculty and administrators in public colleges and universities, and administrative personnel of state educational boards and employees of agencies who are employed at least half-time must join the System's DB Plan. Membership is optional for all other regular employees of public educational institutions who work at least 20 hours per week. There are 607 contributing employers in the System. The DB Plan's membership consisted of the following as of June 30, 2015:

Inactive Plan Members or Beneficiaries Currently Receiving Benefits	58,929
Inactive Plan Members Entitled to But Not Yet Receiving Benefits*	10,457
Active Plan Members	90,388
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	159,774

* Does not include 9,930 of nonvested terminated members entitled to a refund of their member contributions.

DC Plan: Members are also offered a tax-deferred defined contribution plan qualified under the Internal Revenue Code ("IRC") Section 403(b). The DC Plan is also referred to by the System as the Tax-Sheltered Annuity Plan. Membership in the DC Plan is voluntary, and investments primarily consist of mutual funds and are participant directed. ING is responsible for administrative services, including custody and record keeping services.

The DC Plan had approximately 3,586 participants as of June 30, 2015. Contributions are voluntary and require a minimum of \$200 per year. The maximum deferral amount is the lesser of 100 percent of the participant's compensation or the maximum amount allowed by the IRC, currently \$18,000. Participants age 50 and older may contribute an additional \$6,000 if they qualify for the catch up provision.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 2. Summary of Significant Accounting Policies

Basis of accounting: The System has prepared its financial statements in accordance with accounting principles generally accepted in the United States of America and using the economic resources measurement focus. 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 they are earned and become measurable, and investment purchases and sales are recorded as of their trade dates. Member and employer contributions are established by Oklahoma Statutes as a percentage of salaries and are recognized when due, pursuant to legal requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the Oklahoma Statutes. Administrative expenses are funded through investment earnings.

Budgetary control: The System prepares and submits an annual budget of operating expenses on the cash basis for monitoring and reporting to the Office of Management and Enterprise Services. The System's budget process follows the budget cycle for State operations as outlined by the Office of Management and Enterprise Services.

The Executive Director may approve changes within the budget, but a change to the total budget must be handled according to the provision of Title 62 O.S. Sec. 41.12 of the Oklahoma Statutes.

Investments: The System is authorized to invest in eligible investments as approved by the Board of Trustees as set forth in the System's 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 at any time during the year at the discretion of the Board. While the Board made several changes to the Investment Policy during FY 2015, the changes were to make existing provisions more clear. They were not significant from a financial risk or accounting standpoint.

System investments are reported at fair value. The short-term investment fund is comprised primarily of investments in a money market fund, which are reported at cost, which approximates fair value. Debt and equity securities are reported at fair value, as determined by the System's custodial agent, using pricing services or prices quoted by independent brokers based on the latest reported sales prices at current exchange rates for securities traded on national or international exchanges. The Security Lending Institutional Daily Assets Fund represents investment in JP Morgan's Institutional Daily Assets Fund and is carried at amortized cost, which approximates fair value.

The System also invests as a limited partner in alternative investments. These investments employ specific strategies such as leverage buyouts, venture capital, growth capital, distressed investments, and mezzanine capital. The strategies of all such funds are long term and illiquid in nature. As a result, investors are subject to redemption restrictions which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution. Alternative investment partnerships are valued using their respective net asset value (NAV) and are audited annually. The most significant input into the NAV of such an entity is the fair value of its investment holdings. These holdings are valued by the general partners on a quarterly or semi-annual basis, in conjunction with management and investment advisors and consultation with valuation specialists. The management assumptions are based upon the nature of the investment and the underlying business. The valuation techniques vary based upon investment type and involve a certain degree of expert judgment.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 2. Summary of Significant Accounting Policies (Continued)

The System's real estate investments are primarily through limited partnerships. Properties owned by the partnership are subject to independent third-party appraisals performed in accordance with the Uniform Standards of Professional Appraisal Practice once every year. The System's real estate investments are long term and illiquid in nature. As a result, investors are subject to redemption restrictions which generally limit distributions and restrict the ability of limited partners to exit a partnership investment prior to its dissolution. Limited partner interests are valued by the System using the NAV of the partnership. The most significant input into the NAV of such an entity is the value of its investment holdings. These holdings are valued by the general partners on a continuous basis, audited annually, and may be periodically appraised by an independent third party. The valuation assumptions are based upon both market and property specific inputs which are not observable and involve a certain degree of expert judgment.

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

International investment managers use forward foreign exchange contracts to enhance returns or to control volatility. Currency risks arise due to foreign exchange rate fluctuations. Forward foreign exchange contracts are negotiated between two counter-parties. The System could incur a loss if its counter-parties failed to perform pursuant to the terms of their contractual obligations. The gains and losses on these contracts are included in the income in the period in which the exchange rates change. See Note 3 for additional information regarding investment derivatives as of June 30, 2015.

The System's investment policy provides for investment diversification of stocks, bonds, fixed income securities, real estate, alternative investments, and other investment securities along with investment in commingled or mutual funds. Investment securities and investment securities underlying commingled or mutual fund investments are exposed to various risks, such as interest rate, 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 those changes could materially affect the amounts reported in the statements of fiduciary net position.

At June 30, 2015, the asset allocation guidelines established by the Board's investment policy were 40 percent in Domestic Equity, 17.5 percent in International Equity, 23.5 percent in Fixed Income, 5 percent in Private Equity, 7 percent in Real Estate and 7 percent in Master Limited Partnerships.

Capital assets: Capital assets are stated at cost when acquired, net of accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, which range from five to ten years.

Risks and uncertainties: Contributions to the System and the actuarial information included in Note 11 and the required supplementary information are reported based on certain assumptions pertaining to interest rates, inflation rates, 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.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 2. Summary of Significant Accounting Policies (Continued)

Income taxes: The System is exempt from federal and state income taxes and has received a favorable determination from the Internal Revenue Service (the "IRS") under Internal Revenue Code (the "IRC") Section 401(a). The System's 403(b) Plan is also tax-exempt and has received a private letter ruling from the IRS.

Compensated absences: It is the State's policy to permit employees to accumulate earned but unused vacation and sick leave. Employees earn annual vacation leave based upon their start date and years of service. All accrued vacation leave is payable upon termination, resignation, retirement, or death. Sick leave does not vest to the employee and therefore is not recorded as a liability. Amounts due to the employees for compensated absences were approximately \$246,000 at June 30, 2015.

Plan termination: In the event the System terminates, the board of trustees will distribute the net assets of the System to provide the following benefits in the order indicated:

Accumulated contributions will be allocated to each respective member, former member, retired member, joint annuitant, or beneficiary then receiving payments.

The balance of such assets, if any, will be allocated to each member then having an interest in the System based upon the excess of their retirement income under the System less the retirement income, which is equal to the actuarial equivalent of the amount allocated to them in accordance with the preceding paragraph in the following order:

- Those retired members, joint annuitants, or beneficiaries receiving payments
- Those members eligible to retire
- Those members eligible for early retirement
- Former members electing to receive a vested benefit
- All other members

Use of estimates: The preparation of the System's financial statements in conformity with accounting principles generally accepted in the United States of America requires the System's management to make significant estimates and assumptions that affect the reported amounts of net position held in trust for pension benefits at the date of the financial statements and the actuarial information included in Note 11 and the required supplementary information as of the benefit information date, the changes in System 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.

Comparative totals: The financial statements include certain prior year summarized comparative information in total but not at the level of detail required for a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the System's financial statements for the year ended June 30, 2014, from which the summarized information was derived. Certain reclassifications have been made to the comparative totals to conform with the 2015 financial statement presentation. Such reclassifications have had no effect on changes in fiduciary net position as previously reported.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments

Custodial credit risk: Custodial credit risk is the risk that in the event of the failure of a counterparty, the System will not be able to recover the value of its bank deposits or investments. Bank deposits are exposed to custodial credit risk if they are uninsured and uncollateralized. In relation to its bank deposits, the System is not considered to be exposed to custodial credit risk. Although the System does not have a formal bank deposit policy for custodial credit risk, the State Treasurer holds all of the System's bank deposits. As required by Oklahoma Statutes, all bank deposits held by the State Treasurer are insured by Federal Deposit Insurance Corporation, collateralized by securities held by the cognizant Federal Reserve Bank, or invested in U.S. government obligations.

At June 30, 2015, the carrying amount of the System's bank deposits was approximately \$95,635,000. The bank balance of the System's bank deposits at June 30, 2015 was approximately \$10,461,000.

Investment securities are exposed to custodial credit risk if they are uninsured, are not registered in the name of the System, and are held by a counterparty or the counterparty's trust department but not in the name of the System. While the System's investment policy does not specifically address custodial credit risk, it does limit the amount of cash equivalents and short-term investments to no more than 5 percent of each manager's portfolio. At June 30, 2015, the System had uninsured and uncollateralized cash and cash equivalents of approximately \$10,898,000 with its custodial agent. The System's custodial agent for the year ended June 30, 2015 was JP Morgan. The System had no other investments exposed to custodial credit risk at June 30, 2015.

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 System's investment policy places limits on the amount of the fixed income portfolio that may be invested in bonds rated Ba1 or lower by Moody's or BB+ or lower by Standard & Poor's.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

Investment Type	S&P Ratings (Unless Noted)	Fair Value (in Thousands)	Fair Value as a Percent of Total Fixed Income Fair Value
U.S. corporate bonds	AAA	\$ 121,547	4.2%
	AA+	48,407	1.7%
	AA	15,234	0.5%
	AA-	12,323	0.4%
	A+	21,363	0.7%
	A	71,196	2.5%
	A-	77,485	2.7%
	BBB+	113,618	4.0%
	BBB	159,074	5.6%
	BBB-	277,088	9.8%
	BB+	170,704	6.0%
	BB	179,268	6.3%
	BB-	141,206	4.9%
	B+	119,216	4.2%
	B	126,936	4.4%
	B-	80,773	2.8%
	CCC+	70,754	2.5%
	CCC	12,747	0.4%
	CCC-	4,432	0.2%
	CC	400	0.0%
	C	156	0.0%
	D	1,168	0.0%
	NR	135,203	4.7%
Total U.S. corporate bonds		1,960,298	68.5%
International corporate bonds	A+	2,652	0.1%
	A-	1,819	0.1%
	BBB+	1,398	0.0%
	BBB	2,818	0.1%
	BBB-	403	0.0%
	B+	472	0.0%
	B	2,204	0.1%
	CCC+	2,995	0.1%
	NR	3,053	0.1%
Total international corporate bonds		17,814	0.6%

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

Investment Type	S&P Ratings (Unless Noted)	Fair Value (in Thousands)	Fair Value as a Percent of Total Fixed Income Fair Value
International government securities	AAA	8,094	0.3%
	AA+	4,850	0.2%
	AA	2,953	0.1%
	A+	2,937	0.1%
	A	16,580	0.6%
	A-	3,180	0.1%
	BBB+	5,976	0.2%
	BBB	11,002	0.4%
	BBB-	1,624	0.1%
	BB+	5,668	0.2%
	BB	860	0.0%
	BB-	2,038	0.1%
	B+	897	0.0%
	B-	1,707	0.1%
	CCC	347	0.0%
	CCC-	551	0.0%
	NR	16,619	0.6%
Total international government securities		85,883	3.1%
Municipal bonds	A	588	0.0%
	A-	756	0.0%
	BBB+	1,178	0.0%
	NR	502	0.0%
Total municipal bonds		3,024	0.0%
U.S. government securities	AA+	797,386	27.8%
	CCC-	207	0.0%
Total U.S. government securities		797,593	27.8%
		2,864,612	100.0%

Short-term investments include \$293,233,748 invested in a money market mutual fund with an S&P rating of AAAM.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash 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 System's investment policy does not specifically address the duration of fixed-income securities, the System's management does monitor interest rate risk by monitoring the performance of each investment manager. As of June 30, 2015, the System had the following investments with maturities (dollars in thousands):

Investment Type	Investment Maturities at Fair Value				
	Less Than One Year	One to Five Years	Six to Ten Years	More Than Ten Years	Total Fair Value
US corporate bonds	\$ 206,764	\$ 495,442	\$ 965,372	\$ 292,720	\$ 1,960,298
International corporate bonds	8,145	3,806	4,100	1,763	17,814
International governmental securities	25,608	15,605	23,108	21,562	85,883
Municipal bonds	-	-	-	3,024	3,024
U.S. government securities	54,262	133,631	64,644	545,056	797,593
	<u>\$ 294,779</u>	<u>\$ 648,484</u>	<u>\$ 1,057,224</u>	<u>\$ 864,125</u>	<u>\$ 2,864,612</u>

Concentration of credit risk: Investments can be exposed to concentration of credit risk if significant amounts are invested in any one issuer. The System's investment policy places limits on the amount that may be invested in securities of any single issuer. As of June 30, 2015, the System did not hold 5% or more of its total investments in any one issuer.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

Foreign currency risk: Foreign currency risk is the potential risk for loss due to changes in exchange rates. The System's investment policy provides that international investment managers invest no more than 30 percent of their portfolio's total assets in one or more issuers in a single country, provided that in the U.K. or Japan such limit shall be 35 percent. Investment in cash and cash equivalents, foreign equities, and fixed-income securities as of June 30, 2015 is shown in the following table by monetary unit to indicate possible foreign currency risk (dollars in thousands):

Currency	Equities	Corporate Bonds	Government Bonds	Foreign Exchange Contracts	Cash and Cash Equivalents	Grand Total
Australian Dollar	\$ 92,944	\$ 1,455	\$ -	\$ (1)	\$ 499	\$ 94,897
Brazilian Real	9,255	403	10,561	-	-	20,219
Canadian Dollar	36,693	-	-	-	34	36,727
Chilean Peso	-	-	1,074	-	-	1,074
Danish Krone	26,866	-	-	-	94	26,960
Euro	621,264	6,193	72	1	2,375	629,905
Hong Kong Dollar	86,625	-	-	-	379	87,004
Indonesian Rupiah	1,722	-	-	-	-	1,722
Israeli Shekel	4,997	-	-	-	25	5,022
India Rupee	-	-	3,485	-	-	3,485
Japanese Yen	533,737	-	-	(5)	3,479	537,211
Malaysian Ringgit	278	-	-	-	-	278
Mexican Peso	6,384	1,762	20,655	16	-	28,817
New Taiwan Dollar	24,011	-	-	-	-	24,011
New Turkish Lira	3,064	-	-	-	-	3,064
New Zealand Dollar	4,783	-	-	-	73	4,856
Norwegian Krone	19,066	394	-	-	89	19,549
Philippine Peso	4,403	-	2,329	-	-	6,732
Polish Zloty	3,479	-	-	-	-	3,479
Pound Sterling	460,312	7,607	-	(54)	2,595	470,460
Qatari Rial	818	-	-	-	-	818
Singapore Dollar	18,950	-	-	-	166	19,116
South African Rand	7,237	-	-	1	-	7,238
South Korean Won	40,268	-	-	-	-	40,268
Swedish Krona	37,988	-	-	-	213	38,201
Swiss Franc	180,495	-	-	-	68	180,563
Thai Baht	5,246	-	-	-	-	5,246
	2,230,885	17,814	38,176	(42)	10,089	2,296,922
Not subject to foreign currency risk	7,520,938	1,963,321	845,301	-	326,946	10,656,506
Total	\$ 9,751,823	\$ 1,981,135	\$ 883,477	\$ (42)	\$ 337,035	\$ 12,953,428

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

Derivative instruments: The System's investment derivatives include forward currency contracts. These investments are not speculative in nature and do not increase investment risk beyond allowable limits specified in the System's investment policy. The changes in fair values of the System's investment derivatives are included in net appreciation in fair value of investments in the accompanying statement of fiduciary net position. The fair values of the System's investment derivatives are included in due from brokers for securities sold and due to brokers for securities purchased in the accompanying statement of plan net position. The fair value balances and notional amounts of derivative instruments outstanding at June 30, 2015, classified by type, and the changes in fair value of such derivative instruments for the year then ended as reported in the 2015 financial statements are as follows (dollars in thousands):

Investment Derivatives	Change in Fair Value	Fair Value	Notional
Forward—foreign currency purchases	\$ 13	\$ (1)	\$ 1,110
Forward—foreign currency sales	1,152	(41)	9,988

A foreign currency forward contract is an agreement that obligates the parties to exchange given quantities of currencies at a pre-specified exchange rate on a certain future date. The fair values of the forward contracts are estimated based on the present value of their estimated future cash flows.

The foreign currency forward contracts subject the System to foreign currency risk because the investments are denominated in international currencies. The risks are described in the foreign currency risk schedule where the fair value of the foreign currency contracts in U.S. dollars is presented.

Rate of return: For the year ended June 30, 2015, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 3.04 percent. The money-weighted rate of return expresses investment performance, net of investment expense, as adjusted for the changing amounts actually invested.

Note 4. Commitments

At June 30, 2015, the System has total capital commitments related to alternative and real estate investments of \$2,380,400,000. Of this amount, \$357,601,967 remained unfunded.

Note 5. Securities Lending Activity

The System's investment policy and State statutes provide for its participation in a securities lending program. The program is administered by the System's master custodian, and there are no restrictions on the amount of loans that can be made. Certain securities of the System are loaned to participating brokers, who must provide collateral in the form of cash, U. S. Treasury or government agency securities, or letters of credit issued by approved banks. Under the terms of the agreement, collateralization of the fair value of the loaned securities must be provided in the amount of 102 percent when the security to be loaned and the collateral are in the same currency and 105 percent when the loan and collateral currencies are dissimilar.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 5. Securities Lending Activity (Continued)

The fair value of securities on loan at June 30, 2015 was approximately \$4,626,000. The underlying collateral for these securities had a fair value of approximately \$4,730,000 at June 30, 2015. Securities on loan as of June 30, 2015 consisted of equity loans collateralized by cash.

At June 30, 2015, the System had no credit risk exposure since the amounts the System owed to borrowers exceeded the amounts borrowers owed the System. The contract with the System's lending agent requires it to indemnify the System if the borrowers fail to return the lent securities. In the event of a collateral shortfall due to a loss in value of investments made with cash collateral, such loss would be the responsibility of the System.

All securities loans can be terminated on demand by either the System or the borrower. Cash collateral is invested in a separate account for the System in accordance with investment guidelines approved by the System. At June 30, 2014, the weighted average maturity of the cash collateral investments was 5 days. The cash collateral investments are structured and maintained by the lending agent's investment desk utilizing an asset and liability methodology designed to manage to an appropriate extent any mismatch between the investment maturities and the System's loans.

Note 6. Capital Assets

Capital assets consist of the following at June 30, 2015 (dollars in thousands):

Furniture and fixtures	\$	3,925
Accumulated depreciation		(276)
Capital assets, net	\$	<u>3,649</u>

The System has commitments to lease building space as well as leases on certain equipment. The future minimum commitment for operating leases as of June 30, 2015 was approximately \$203,000. The System's leases are one-year renewable contracts. Rental expense for all operating leases amounted to approximately \$220,000 for the year ended June 30, 2015.

Note 7. Contributions

All contribution rates are defined or amended by the Oklahoma Legislature. All active members contribute to the System; however, the employer may elect to make all or part of the contribution for its employees. There are special provisions for members of higher education who joined the System before July 1, 1995. The annual employer contributions reported for the years ended June 30, 2015 were \$392,051,458. Employers satisfied 100 percent of their contribution requirements for 2015.

All members must contribute 7 percent of regular annual compensation, not to exceed the member's maximum compensation level, which for the year ended June 30, 2015 was the full amount of regular annual compensation.

The employers are required to contribute a fixed percentage of annual compensation on behalf of active clients. The employer contribution rate was 9.5 percent beginning on January 1, 2011 for all remitting entities other than comprehensive and four year regional universities. The employer contribution rate was 8.55 percent starting on January 1, 2011 for comprehensive and four year universities. The rates for fiscal years 2015 are applied on the full amount of the Client's regular annual compensation up to certain limits prescribed by the Internal Revenue Code.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 8. Benefits

The System provides defined retirement benefits based on members' final compensation, age, and term of service. In addition, the retirement program provides for benefits upon disability and to survivors upon the death of eligible members. Title 70 O. S. Sec. 17-105 defines all retirement benefits. The authority to establish and amend benefit provisions rests with the State Legislature.

Benefit provisions include:

- Members become 100 percent vested in retirement benefits earned to date after five years of credited Oklahoma service. Members who joined the System on June 30, 1992 or prior are eligible to retire at maximum benefits when age and years of creditable service total 80. Members joining the System after June 30, 1992 are eligible for maximum benefits when their age and years of creditable service total 90. Members whose age and service do not equal the eligible limit may receive reduced benefits as early as age 55, and at age 62 receive unreduced benefits based on their years of service. The maximum retirement benefit is equal to 2 percent of final compensation for each year of credited service.
- Final compensation for members who joined the System prior to July 1, 1992 is defined as the average salary for the three highest years of compensation. Final compensation for members joining the System after June 30, 1992 is defined as the average of the highest five consecutive years of annual compensation in which contributions have been made. The final average compensation is limited for service credit accumulated prior to July 1, 1995 to \$40,000 or \$25,000, depending on the member's election. Monthly benefits are 1/12 of this amount. Service credits accumulated after June 30, 1995 are calculated based on each member's final average compensation, except for certain employees of the two comprehensive universities. Upon the death of a member who has not yet retired, the designated beneficiary shall receive the member's total contributions plus 100 percent of interest earned through the end of the fiscal year, with interest rates varying based on time of service. A surviving spouse of a qualified member may elect to receive, in lieu of the aforementioned benefits, the retirement benefit the member was entitled to at the time of death as provided under the Joint Survivor Benefit Option.
- Upon the death of a retired member, the System will pay \$5,000 to the designated beneficiary, in addition to the benefits provided for the retirement option selected by the member.
- A member is eligible for disability benefits after ten years of credited Oklahoma service. The disability benefit is equal to 2 percent of final average compensation for the applicable years of credited service.
- Upon separation from the System, members' contributions are refundable with interest based on certain restrictions provided in the plan, or by the IRC.
- Members may elect to make additional contributions to a tax-sheltered annuity program up to the exclusion allowance provided under the IRC under Code Section 403(b).

At the election of each eligible member initiating receipt of retirement benefits, the System remits between \$100 and \$105 per month per eligible retiree to the Employees Group Insurance Division ("EGID"), depending on the members' years of service during 2015. Such amounts were approximately \$30,363,000 in 2015 and are included in retirement and other benefits expense. The System performs no administrative functions related to the benefits provided by EGID, and the payments have a minimal and declining impact on the operation of the System.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 9. Dedicated Tax

The plan receives funds provided by the State of Oklahoma, a non-employer contributing entity, through 5.0 percent of the State's sales, use, and corporate and individual income taxes collected as dedicated tax. The System receives 1 percent of the cigarette taxes collected by the State and receives 5 percent of net lottery proceeds collected by the State. The System received approximately \$311,945,000 from the State in 2015. Amounts due from the State were approximately \$29,978,000 at June 30, 2015.

Note 10. Plan Amendments

The 2015 legislative session resulted in no bills with an actuarial impact on the system.

Note 11. DB Plan Net Pension Liability and Actuarial Information

The components of the net pension liability of the employers at June 30, 2015 were as follows:

Total pension liability	\$ 20,551,132,567
Plan fiduciary net position	(14,449,506,469)
Employers' net pension liability	<u>\$ 6,101,626,098</u>

Plan fiduciary net position as a percentage of the total pension liability	70.31%
----------------------------------------------------------------------------	--------

The total pension liability as of June 30, 2015, was determined based on an actuarial valuation prepared as of June 30, 2015 using the following actuarial assumptions:

- Actuarial Cost Method—Entry Age Normal
- Inflation—3.00 percent
- Future Ad Hoc Cost-of-living Increases—None
- Salary Increases—Composed of 3.75 percent wage inflation, including 3.00 percent price inflation, plus a service-related component ranging from 0.00 percent to 8.00 percent based on years of service
- Investment Rate of Return—8.00 percent
- Retirement Age— Experience-based table of rates based on age, service, and gender. Adopted by the Board in May 2015 in conjunction with the five year experience study for the period ending June 30, 2014

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 11. DB Plan Net Pension Liability and Actuarial Information (Continued)

- Mortality Rates after Retirement— Males: RP-2000 Combined Healthy mortality table for males with White Collar Adjustments. Generational mortality improvements in accordance with Scale BB from the table's base year of 2000. Females: GRS Southwest Region Teacher Mortality Table, scaled at 105%. Generational mortality improvements in accordance with Scale BB from the table's base year of 2012.
- Mortality Rates for Active Members—RP-2000 Employee Mortality tables, with male rates multiplied by 60% and female rates multiplied by 50%

Measurement of the net pension liability: The net pension liability is measured as the total pension liability, less the amount of the plan's fiduciary net position. In actuarial terms, this is analogous to the accrued liability as measured using the individual entry age normal actuarial cost method less the market value of assets (not the smoothed actuarial value of assets seen in actuarial valuations based on the Board's adopted assumptions and methods).

A single discount rate of 8.00 percent was used to measure the total pension liability as of June 30, 2014 and June 30, 2015. This single discount rate was based solely on the expected rate of return on pension plan investments of 8.00 percent. Based on the stated assumptions and the projection of cash flows, the pension plan's fiduciary net position and future contributions were projected to be available to finance 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.

The projection of cash flows used to determine this single discount rate assumed that plan member and employer contributions will be made at the current statutory levels and remain a level percentage of payroll. The projection of cash flows also assumed that the State's contribution plus the matching contributions will remain a constant percent of projected member payroll based on the past five years of actual contributions.

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.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 11. DB Plan Net Pension Liability and Actuarial Information (Continued)

The target asset allocation and best estimates of arithmetic expected real rates of return for each major asset class as of June 30, 2015 are summarized in the following table:

Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return
Domestic All Cap Equity*	7.0%	6.0%
Domestic Large Cap Equity	10.0%	5.3%
Domestic Mid Cap Equity	13.0%	6.1%
Domestic Small Cap Equity	10.0%	6.6%
International Large Cap Equity	11.5%	5.8%
International Small Cap Equity	6.0%	5.8%
Core Plus Fixed Income	17.5%	1.8%
High-Yield Fixed Income	6.0%	4.1%
Private Equity	5.0%	7.6%
Real Estate**	7.0%	5.5%
Master Limited Partnerships	7.0%	7.6%
Total	100.0%	

* The Domestic All Cap Equity total expected return is a combination of 3 rates – US Large Cap, US Mid Cap and US Small Cap.

**The Real Estate total expected return is a combination of US Direct Real Estate (unlevered) and US Value added Real Estate (unlevered).

Sensitivity of the net pension liability to the single discount rate assumption: The following table provides the sensitivity of the net pension liability to changes in the discount rate as of June 30, 2015. In particular, the table presents the plan's net pension liability, if it were calculated using a single discount rate that is one-percentage-point lower or one-percentage-point higher than the single discount rate:

	1% Decrease (7.00%)	Current Discount Rate (8.00%)	1% Increase (9.00%)
Net pension liability	\$ 8,434,863,027	\$ 6,101,626,098	\$ 4,140,434,421

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 12. New Accounting Pronouncement Issued, Not Yet Adopted

In February 2015, GASB issued Statement No. 72, *Fair Value Measurement and Application* (GASB 72). GASB 72 addresses accounting and financial reporting issues related to fair value measurements. The definition of fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. GASB 72 provides guidance for determining a fair value measurement for financial reporting purposes. GASB 72 also provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements. The requirements of GASB 72 will enhance comparability of financial statements among governments by requiring measurement of certain assets and liabilities at fair value using a consistent and more detailed definition of fair value and accepted valuation techniques. GASB 72 also will enhance fair value application guidance and related disclosures in order to provide information to financial statement users about the impact of fair value measurements on a government's financial position. GASB 72 is effective for financial statements for periods beginning after June 15, 2015.

GASB Statement No. 73, *Accounting and Financial Reporting for Pensions and Related Assets That Are Not Within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68* (GASB No. 73): GASB No. 73 was issued June 2015 and will be effective for the Plan beginning with its fiscal year ending June 30, 2016—except those provisions that address employers and governmental nonemployer contributing entities for pensions that are not within the scope of Statement No. 68, which are effective for the Plan beginning with its fiscal year ending June 30, 2017. The Statement establishes requirements for pensions not covered by Statement Nos. 67 and 68 which are essentially the same requirements as Statement No. 68. However, the lack of a pension plan that is administered through a trust that meets specified criteria is reflected in the measurements.

GASB Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments* (GASB No. 76): The objective of GASB No. 76 is to identify—in the context of the current governmental financial reporting environment—the hierarchy of generally accepted accounting principles (GAAP). The "GAAP hierarchy" consists of the sources of accounting principles used to prepare financial statements of state and local governmental entities in conformity with GAAP and the framework for selecting those principles. This Statement reduces the GAAP hierarchy to two categories of authoritative GAAP and addresses the use of authoritative and nonauthoritative literature in the event that the accounting treatment for a transaction or other event is not specified within a source of authoritative GAAP. This Statement supersedes Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The requirements of this Statement are effective for financial statements for periods beginning after June 15, 2015, and should be applied retroactively. Earlier application is permitted.

The Plan is currently evaluating the effects the above GASB Pronouncements will have on its financial statements.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of Changes in Employers' Net Pension Liability (Unaudited)

	Year Ended June 30	
	2015	2014
Total pension liability:		
Service cost	\$ 415,702,261	\$ 409,199,801
Interest	1,538,893,982	1,491,722,137
Benefit changes	-	-
Difference between actual and expected experience	(159,980,414)	(105,344,633)
Assumption changes	346,488,630	-
Benefit payments	(1,201,350,907)	(1,153,051,607)
Refunds	(35,240,176)	(28,718,256)
Net change in total pension liability	904,513,376	613,807,442
Total pension liability:		
Beginning	19,646,619,191	19,032,811,749
Ending (a)	<u>\$ 20,551,132,567</u>	<u>\$ 19,646,619,191</u>
Plan fiduciary net position:		
Contributions-Employer/State	\$ 728,442,070	\$ 707,052,675
Contributions-Members	303,677,304	301,300,811
Net investment income	428,855,747	2,571,707,952
Benefit payments	(1,201,350,906)	(1,153,051,607)
Refunds	(35,240,176)	(28,718,256)
Administrative expense	(4,358,938)	(4,282,605)
Other	-	-
Net change in plan fiduciary net position	220,025,101	2,394,008,970
Plan fiduciary net position:		
Beginning	14,229,481,368	11,835,472,398
Ending (b)	<u>\$ 14,449,506,469</u>	<u>\$ 14,229,481,368</u>
Plan's net pension liability (asset) (a)-(b)	\$ 6,101,626,098	\$ 5,417,137,823

Notes to Schedule:

The change in total pension liability resulting from assumption changes in fiscal year ending 2015 is attributable to the new assumptions adopted by the Board in May 2015.

Teachers' Retirement System of Oklahoma

**Required Supplementary Information
Schedule of Employers' Net Pension Liability (Unaudited)**

	Year Ended June 30	
	2015	2014
Total pension liability	\$ 20,551,132,567	\$ 19,646,619,191
Plan fiduciary net position	14,449,506,469	14,229,481,368
Plan's net pension liability	\$ 6,101,626,098	\$ 5,417,137,823
Plan fiduciary net position as a percentage of the total pension liability	70.31%	72.43%
Covered-employee payroll	\$ 4,338,247,200	\$ 4,304,297,300
Plan's net pension liability (asset) as a percentage of covered-employee payroll	140.65%	125.85%

Notes to Schedule:

The covered employee payroll is an estimate of the actual payroll, imputed from individual member contributions, for the fiscal years ending June 30, 2014 and June 30, 2015.

Teachers' Retirement System of Oklahoma

Required Supplementary Information Schedule of Contributions From Employers and Other Contributing Entities (Unaudited)

	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
Actuarially determined contributions	\$ 550,652,420	\$ 602,936,966	\$ 619,805,640	\$ 588,287,377	\$ 822,419,996	\$ 742,286,289	\$ 714,367,558	\$ 590,495,652	\$ 575,745,142	\$ 535,228,038
Contributions in relation to the actuarially determined contribution:										
Employers (Schools)	392,051,458	386,895,127	373,789,020	376,635,234	364,025,589	366,282,238	338,974,512	308,804,479	271,012,403	241,174,959
State of Oklahoma, a non-employer contributing entity	336,390,612	320,157,548	327,505,309	304,995,663	274,452,205	254,375,139	279,672,051	288,036,554	264,904,170	218,294,582
Contribution deficiency (excess)	\$ (177,789,650)	\$ (104,115,709)	\$ (81,488,689)	\$ (93,343,520)	\$ 183,942,202	\$ 121,628,912	\$ 95,720,995	\$ (6,345,381)	\$ 39,828,569	\$ 75,758,497
Covered-employee payroll	\$ 4,338,247,200	\$ 4,304,297,300	\$ 3,933,100,000	\$ 3,924,800,000	\$ 3,773,300,000	\$ 3,854,800,000	\$ 3,807,900,000	\$ 3,751,400,000	\$ 3,598,900,000	\$ 3,354,900,000
Contributions as a percentage of covered-employee payroll	16.79%	16.43%	17.83%	17.37%	16.92%	16.10%	16.25%	15.91%	14.89%	13.70%

Notes to Schedule:

Actuarially determined contribution rates are calculated as of June 30.

Members and employers contribute based on statutorily fixed rates. The State of Oklahoma contributes 5.0% of revenues from sales taxes, use taxes, corporate and individual income taxes and lottery proceeds. An additional contribution is made for members whose salary is paid from federal funds or certain grant money.

A new set of assumptions and a funding policy were adopted for the June 30, 2015 actuarial valuation and will be first reflected for the Actuarially Determined Contribution determined for the fiscal year ending 2016.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Amortization period	Amortization over an open 30-year period
Asset valuation method	5-year smooth market
Inflation	3.00%
Salary increase	Composed of 3.00% inflation, plus 1.00% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service
Investment rate of return	8.00%
Retirement age	Experience-based table of rates based on age, service and gender. Adopted by the Board in September 2010 in conjunction with the five year experience study for the period ending June 30, 2009
Mortality	RP-2000 Combined Mortality Table, projected to 2016 using Scale AA, multiplied by 90% for males and 80% for females

Teachers' Retirement System of Oklahoma

**Required Supplementary Information
Schedule of Investment Returns (Unaudited)**

	Year Ended June 30	
	2015	2014
Annual money-weighted rate of return, net of investment expenses	3.04%	21.95%

Teachers' Retirement System of Oklahoma

**Schedule of Investment Expenses
For the Year Ended June 30, 2015**

Investment managers	\$ 66,938,996
Investment consultants	882,000
Total investment expenses	<u>\$ 67,820,996</u>

Teachers' Retirement System of Oklahoma

**Schedule of Administrative Expenses
For the Year Ended June 30, 2015**

Salaries and benefits	\$ 2,754,246
General and miscellaneous	688,195
Professional/consultant fees	864,597
Travel and related expenses	45,045
Depreciation expense	6,855
Total administrative expenses	<u>\$ 4,358,938</u>

Teachers' Retirement System of Oklahoma

**Schedule of Professional/Consultant Fees
For the Year Ended June 30, 2015**

Actuarial	\$	99,374
Medical		9,400
Legal		48,499
Audit		266,141
Data processing		190,654
Miscellaneous		250,529
Total professional/consultant fees	\$	864,597

**Internal Control Over Financial Reporting and on
Compliance and Other Matters Based on an Audit of Financial
Statements Performed in Accordance with *Government Auditing Standards***

Independent Auditor's Report

Board of Trustees
Teachers' Retirement System of Oklahoma
Oklahoma City, Oklahoma

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Teachers' Retirement System of Oklahoma (the System), a component unit of the state of Oklahoma, which comprise the statement of fiduciary net position as of June 30, 2015, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated December 22, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. We did identify one deficiency in internal control, described in the accompanying schedule of reportable findings as Finding 2015-01, that we consider to be a material weakness.

The System's Response to Finding

The System's response to the finding identified in our audit is described in the accompanying schedule of reportable findings. The System's response was not subjected to the auditing procedures applied in the audit of the financial statements, and, accordingly, we express no opinion on it.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

RSM US LLP

Oklahoma City, Oklahoma
December 22, 2015

Teachers' Retirement System of Oklahoma

Summary Schedule of Prior Audit Findings For the Year Ended June 30, 2015

Finding 2014-01

Criteria: The Plan should maintain a system of internal controls that ensures financial statements and footnote disclosures are accurately prepared in accordance with accounting principles generally accepted in the United States of America. Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*, requires that the Plan disclose its net pension liability in the footnotes of the Plan's financial statements.

Condition: The Plan relies on an actuary to calculate the net pension liability as disclosed in the notes to the financial statements. As part of the actuarial valuation process, the Plan must provide the actuary with accurate and complete information about Plan participants. The Plan does not currently have sufficient internal controls to ensure that participant data provided to the actuary is accurate and complete.

Cause: The Plan recently implemented a new accounting system where participating employers upload participant data directly to the Plan's portal and there is no review to verify the information uploaded is accurate and complete. Also as part of the change, participant statements are no longer available for participant review to verify the correct information was provided to the Plan.

Effect and potential effect: The Plan's lack of internal control could cause the data sent to the actuary to be incomplete and inaccurate causing the net pension liability to be materially misstated.

Recommendation: We recommend that the Plan implement additional controls to help mitigate the risk that the data sent to the actuary might be materially misstated. The additional controls should ensure that participant and payroll information uploaded by the employers into the OTRS system is reviewed by plan participants and/or an employee at OTRS to verify its completeness and accuracy.

Plan response: Oklahoma Teachers Retirement substantially agrees with this finding. Every multi-employer plan is heavily reliant on data submitted by its participating employers. OTRS cannot be a guarantor that it is 100 percent accurate. However, OTRS acknowledges that it needs a better system to make sure the data is as reliable as possible. OTRS will begin to collect data from participating employers on new employees for the FY-2015 fiscal year. This data will be checked against what the schools have sent through the online payroll reporting portal that was loaded into ALICE (OTRS' pension administration system). Exceptions will be investigated and corrected as needed. The OTRS Finance Department has asked the software developer of ALICE to modify a program to add a check box on the client screen so that reports can be run to indicate which employees still need to be verified. OTRS can begin doing this immediately.

OTRS is working with its software developer to finish development of an online client portal for active and retired employees. We are assessing whether to wait for all client accounts to be audited or to go live with the new site with data that is good. OTRS will provide access on its portal to a personalized statement as recommended by the auditors. OTRS will encourage clients to review the information on these statements and report any discrepancies they find. It is anticipated that this will be completed by the end of fiscal year 2015.

Comment: This finding has been repeated as Finding 2015-01.

Teachers' Retirement System of Oklahoma Schedule of Reportable Findings

Year Ended June 30, 2015

Finding 2015-01

Criteria: The Plan should maintain a system of internal controls that ensures financial statements and footnote disclosures are accurately prepared in accordance with accounting principles generally accepted in the United States of America. Governmental Accounting Standards Board (GASB) Statement No. 67, *Financial Reporting for Pension Plans*, requires that the Plan disclose its net pension liability in the footnotes of the Plan's financial statements.

Condition: The Plan relies on an actuary to calculate the net pension liability as disclosed in the notes to the financial statements. As part of the actuarial valuation process, the Plan must provide the actuary with accurate and complete information about Plan participants. The Plan does not currently have sufficient internal controls to ensure that participant data provided to the actuary, including payroll and salary information, is accurate and complete.

During 2015, management developed the response below to address this control deficiency; however, the control was not placed into operation until 2016.

Cause: The Plan recently implemented a new accounting system where participating employers upload participant data directly to the Plan's portal and there is no review to verify the information uploaded is accurate and complete. Also as part of the change, participant statements are no longer available for participant review to verify the correct information was provided to the Plan.

Effect and potential effect: The Plan's lack of internal control could cause the data sent to the actuary to be incomplete and inaccurate causing the net pension liability to be materially misstated.

Recommendation: We recommend that the Plan implement additional controls to help mitigate the risk that the data sent to the actuary might be materially misstated. The additional controls should ensure that participant and payroll information uploaded by the employers into the OTRS system is reviewed by plan participants and/or an employee at OTRS to verify its completeness and accuracy.

Plan response: The planned response for this finding is related to the entire reporting process for hundreds of employers. We decided to handle this issue at the same time with a general update to the Employer Reporting procedures for the FY 2016 reporting year. So effective July 1, 2015, when an eligible employee begins employment with an OTRS participating employer the employer provides the employee a copy of the OTRS Personal Data Form 1A. This form is filled out by the employee and submitted directly to OTRS. Simultaneously, the employer submits the relevant employee information to OTRS via the Employer Portal. In recent weeks, OTRS has formalized an additional step. Now once the Personal Data Form 1A is received at OTRS it is checked against the employer provided information that is in Alice via the Employer Portal. If there are discrepancies the information in Alice is changed to match that on the Personal Data Form 1A. The Personal Data Form 1A is then scanned into Alice and a box entitled "New Member Validation" in the client's account is checked to establish that all aforementioned steps have been completed.

