

Tulsa County Employees' Retirement System

Financial Statements and
Independent Auditor's Report

June 30, 2019 and 2018

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Independent Auditor's Report

The Board of Trustees
Tulsa County Employees' Retirement System

Report on the Financial Statements

We have audited the accompanying financial statements of Tulsa County Employees' Retirement System (the System), a component unit of Tulsa County, Oklahoma, which comprise the statements of fiduciary net position as of June 30, 2019 and 2018, the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express opinions 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 from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2019 and 2018, and the respective changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management's discussion and analysis on pages 5 to 12, as well as the schedule of changes in net pension liability and related ratios, contributions from employer and investment returns on pages 26 through 28, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The accompanying schedules of administrative expenses, investment expenses and payments to consultants on page 29 are presented for purposes of additional analysis and are not a required part of the basic 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 basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the basic 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 November 12, 2019 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.

Stanfield + O'Dell, P.C.

Tulsa, Oklahoma
November 12, 2019

Management's Discussion and Analysis (Unaudited)

Management's Discussion and Analysis (MD&A) of the Tulsa County Employees' Retirement System's (TCERS) financial performance provides an overview of the financial activities and funding condition for the fiscal years ending June 30, 2019, 2018 and 2017.

TCERS is classified as a Pension Trust Fund and is reported as a component unit of Tulsa County. The Pension Trust Fund accounts for the activities of the TCERS, which accumulates resources for pension benefit payments to qualified retirees, beneficiaries, and future retirees. The accompanying basic financial statements of TCERS are reported on an accrual basis of accounting and are reported in conformity with generally accepted accounting principles. Under the accrual basis of accounting, revenues are recognized when earned instead of when received and expenses are recognized when incurred instead of when paid.

Please review the MD&A in conjunction with the transmittal letter and the basic financial statements.

Financial Highlights

- The fiduciary net position restricted for pensions for fiscal year 2019 decreased by \$2,371,152 (-0.81%). The fiduciary net position restricted for pensions for fiscal year 2018 increased by \$7,301,283 (2.57%). All the fiduciary net position restricted for pension benefits is available to meet TCERS's ongoing obligations to plan members and their beneficiaries.
- Employer contributions for fiscal year 2019 increased by \$285,743 (2.64%) compared to 2018. Employer contributions for fiscal year 2018 decreased by \$28,985 (-0.27%) compared to 2017.
- Employee contributions for fiscal year 2019 increased by \$52,641 (2.74%) compared to 2018. Employee contributions for fiscal year 2018 increased by \$380,307 (24.66%) compared to 2017.
- The net investment income for fiscal year 2019 decreased by \$9,217,720 (-58.23) compared to 2018, mainly due to the unrealized gains and losses that occurred during fiscal year ended June 30, 2019. The net investment income for fiscal year 2018 decreased by \$8,765,733 (35.64%) compared to 2017, mainly due to the net depreciation in the fair value of investments that occurred during fiscal year ended June 30, 2018.
- Benefit payments increased by \$745,129 (3.54%) during fiscal year ended June 30, 2019. Benefit payments increased by \$1,731,954 (8.96%) during fiscal year ended June 30, 2018.

Using the Comprehensive Annual Financial Report

The basic financial statements reflect the activities of TCERS and are reported in the Statements of Fiduciary Net Position, the Statements of Changes in Fiduciary Net Position, and the Notes to Financial Statements. All activities are recorded using an accrual basis of accounting and the economic resource measurement focus. The accrual basis of accounting recognizes increases and decreases in economic resources as soon as the underlying event or transaction occurs. Transactions are recognized when earned and incurred regardless of the timing of cash flows.

The operating statement of the TCERS focuses on changes in economic resources during the period. Net position (total assets and total deferred outflows less total liabilities and total deferred inflows) is used as a practical measure of economic resources. Accordingly, the TCERS operating statement includes all transactions and events that increase or decrease net position, such as additions and deductions.

A discussion of the actual components of this comprehensive annual financial report, including the basic financial statements, is presented in the transmittal letter.

Management's Discussion and Analysis - continued
(Unaudited)

Statements of Fiduciary Net Position

The Statements of Fiduciary Net Position shows the financial position of plan assets and liabilities by investment and accounting categories. The excess of assets and deferred outflows over liabilities and deferred inflows is reported as Net position restricted for pensions. Over time, increases or decreases in net position restricted for pensions may serve as a useful indicator of whether the financial position of the TCERS is improving or deteriorating. The following condensed comparative summary of the Statements of Fiduciary Net Position as of June 30, 2019, 2018 and 2017, demonstrates that the TCERS is primarily focused on the cash, receivables, investments, liabilities and net position restricted for pensions.

	2019	2018	2017
Cash	\$ 392,839	\$ 468,191	\$ 523,606
Receivables	2,967,343	2,755,505	2,527,341
Investments	<u>287,697,372</u>	<u>289,704,246</u>	<u>282,640,888</u>
Total assets	<u>291,057,554</u>	<u>292,927,942</u>	<u>285,691,835</u>
Total liabilities	<u>1,976,361</u>	<u>1,475,597</u>	<u>1,540,773</u>
Net position restricted for pensions	<u>\$289,081,193</u>	<u>\$291,452,345</u>	<u>\$284,151,062</u>

During each fiscal year, the average daily balance of cash on hand typically varies within a range of \$150,000 to \$1,000,000. The cash balance for all three fiscal years was within the range of the projected average daily cash balance. Total receivables increased by \$211,838 during fiscal year ended June 30, 2019, mainly due to the increase in payments from brokers for unsettled trades.

Investments at fair value decreased by \$2,006,874 (-0.69%) during the fiscal year ended June 30, 2019. Investments at fair value increased by \$7,063,358 (2.50%) during the fiscal year ended June 30, 2018.

The average return on investments of 6.17% for the past three fiscal years is less than the expected portfolio returns of 7.25%. During the last fiscal year, the intermediate fixed income portfolio underperformed the benchmark Bloomberg Barclay's Intermediate U.S. Govt/Credit Index rate of 6.93% and finished the year with a return of 6.60%. The core fixed income portfolio outperformed the benchmark Bloomberg Barclay's U.S. Aggregate Index rate of 7.87% and finished the year with a return of 8.02%. The high yield fixed income portfolio underperformed the benchmark ICE BofA Merrill Lynch High Yield Master II rate of 7.58% and finished the year with a return of 5.46%. The active duration fixed income portfolio outperformed the benchmark Bloomberg Barclay's U.S. Aggregate Index rate of 7.87% and finished the year with a return of 12.20%. The S&P 500 index fund outperformed the benchmark S&P 500 Index rate of 10.42% and finished the year with a return of 10.45%. The small/mid (smid) cap equity portfolio underperformed the benchmark Russell MidCap Index rate of 7.83% and finished the year with a return of -8.26%. The international equity portfolio underperformed the benchmark MSCI EAFE (net) Index rate of 1.08% and finished the year with a return of -2.99%. The Master Limited portfolio underperformed the benchmark Alerian MLP Index rate of 3.09% and finished the year with a return of -2.60%.

Liabilities increased by \$500,764 (33.94%) during the fiscal year ended June 30, 2019, due primarily to the increase in amounts due to brokers for unsettled trades. Liabilities decreased by \$65,176 (-4.23%) during the fiscal year ended June 30, 2018, due to the decrease in the accounts payable and accrued expenses and the obligations payable to brokers for unsettled trades. The net position restricted for pensions decreased by \$2,371,152 (-.81%) mainly due to the net depreciation in the fair value of investments, for the year ending June 30, 2019. The net position restricted for pensions increased by \$7,301,283 (2.57%) resulting from the increase in total assets, due to the increase in employee contributions and the purchase of judgments, for the year ending June 30, 2018.

Management's Discussion and Analysis - continued
(Unaudited)

Statements of Changes in Fiduciary Net Position

The Statements of Changes in Fiduciary Net Position itemizes additions, deductions and net position restricted for pensions. The Statement of Changes in Fiduciary Net Position demonstrates how the TCERS assets have increased (decreased) during the fiscal years ended June 30, 2019, 2018 and 2017. The following condensed comparative summary of the Statements of Changes in Fiduciary Net Position reflects the activities of the TCERS regarding employer and employee contributions, net investment income, benefits paid, administration expenses, refunds and the net increase (decrease) in net position restricted for pension benefits.

	2019	2018	2017
Additions:			
Contributions:			
Members	\$ 1,974,991	\$ 1,922,350	\$ 1,542,043
Employer	11,103,394	10,817,651	10,846,636
Net Investment income	<u>6,612,045</u>	<u>15,829,765</u>	<u>24,595,498</u>
Total additions	<u>19,690,430</u>	<u>28,569,766</u>	<u>36,984,177</u>
Deductions:			
Benefits	21,805,708	21,060,579	19,328,625
Administration expense	95,999	140,364	119,139
Refunds	<u>159,875</u>	<u>67,540</u>	<u>13,600</u>
Total deductions	<u>22,061,582</u>	<u>21,268,483</u>	<u>19,461,364</u>
Net increase (decrease) in net position restricted for pensions	<u>\$ (2,371,152)</u>	<u>\$ 7,301,283</u>	<u>\$17,522,813</u>

The ending net position restricted for pensions for fiscal year ending June 30, 2019 was \$289,081,193 compared to \$291,452,345 for fiscal year ending June 30, 2018.

Collections of employer and employee retirement contributions, as well as earnings from investments and dividends, provide the reserves necessary to finance retirement benefits and cover administrative expense. Contributions and net investment income totaled \$19,690,430 during the fiscal year ending June 30, 2019, which is an \$8,879,336 (-31.08%) decrease in total additions from what was reported the previous fiscal year. Contributions and net investment income decreased \$8,414,411 (-22.75%) from fiscal year ended June 30, 2017 to June 30, 2018.

Employer contributions are based on a percentage of an employee's pay and increased \$285,743 (2.64%) in 2019 as compared to 2018. Employee contributions increased \$52,641 (2.74%) when comparing fiscal year 2019 to 2018.

Net investment income was \$6,612,045 for fiscal year 2019, which represents a \$9,217,720 decrease from fiscal year 2018 compared to fiscal year 2018, due mainly to the net depreciation in fair value of investments of (\$916,690). When comparing fiscal year ended June 30, 2017 to June 30, 2018, there was a \$9,303,558 net appreciation in the fair value of investments in 2018. Comparing fiscal year 2019 to 2018, the fair value of the U.S. Government & Agency obligations and treasury bond mutual funds increased by \$5,645,696. The fair value of domestic corporate bonds and bond mutual funds, and foreign bonds and obligations decreased by \$8,283,453. The fair value of domestic equities and international equities increased by \$1,111,355 and decreased by \$1,385,034, respectively. The money market mutual funds portfolio increased by \$3,197,017 and the judgments decreased by \$2,292,455. Investments during the fiscal year ended June 30, 2019, underperformed the expected rate of return. Interest received was \$96,819 (2.74%) higher during fiscal year 2019. Dividends received were \$858,299 (20.88%) higher during fiscal year 2019.

The primary deductions of a retirement system include the payment of benefits to retirees and beneficiaries, the refund of contributions to former members, and the cost of administering the retirement system. The benefits paid increased by \$745,129 (3.54%) during fiscal year 2019, and by

Management's Discussion and Analysis - continued
 (Unaudited)

\$1,731,954 (8.96%) during fiscal year 2018, due to an increase in the number of employees retiring and the amount of benefits paid to those new retirees. Administration expenses, as of June 30, 2019 were \$44,365 (-31.61%) lower when compared to the previous fiscal year, due to the non-billing of the fiscal year 2018 actuary fee. Refunds represent a return of a nonvested portion of the employee's contribution made to the retirement system which varies from year to year and remains a relatively small expense. The refund of contributions was \$92,335 (136.71%) higher when compared to the previous fiscal year, due to notification to terminated, non-vested employees, of monies eligible for refund.

Analysis of Financial Position and Results of Operations

To analyze the TCERS financial position and results of operations during the reporting periods, the following topics are presented: plan membership, funding and reserves, actuarial assumptions and methods, and asset allocation.

Plan Membership

As of June 30, 2019, 2018 and 2017 the TCERS members are as follows:

	2019	2018	2017
Retirees and beneficiaries receiving benefits	1,297	1,274	1,197
Terminated employees entitled to benefits not yet received	653	617	592
Current active employees:			
Fully vested	954	956	975
Nonvested	<u>849</u>	<u>780</u>	<u>838</u>
Total members	<u>3,753</u>	<u>3,627</u>	<u>3,602</u>

Funding and Reserves

Funds are derived from the excess of additions over deductions and are accumulated to meet future benefit obligations to retirees and beneficiaries. This accumulated balance is referred to as the net position restricted for pensions in the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position presented in the financial section of this report. In addition to the basic financial statements and various note disclosures, defined benefit plans are also required to provide three schedules of long-term actuarial data. The three required supplementary information schedules are the Schedule of Changes in Fiduciary Net Pension Liability and Related Ratios, Schedule of Employer Contributions, and the Schedule of Investment Returns, all of which are presented in the Required Supplementary Information immediately following the notes to financial statements.

The Schedule of Changes in Fiduciary Net Pension Liability and Related Ratios presents detailed information about the pension liabilities for which the pension plan's assets are held and managed. The detailed information shows various components of changes in the net pension liability. This schedule also reports a ratio of Fiduciary Net Position as a percentage of the total pension liability. This percentage is an indication of the funding status of the TCERS and, generally, the greater the percentage, the stronger the retirement system. A high level of funding gives plan members more assurance that their pension benefits are secure. The ratio of plan Fiduciary Net Position to the total pension liability is 70.04% at June 30, 2019. This schedule will ultimately include ten years of information once such data becomes available. Since this is the sixth year to include this RSI schedule in accordance with GASB 67, *Financial Reporting for Pension Plans*, only six fiscal year's information is reported.

The Schedule of Employer Contributions shows the actuarially determined contributions for TCERS and the actual contributions made by TCERS. For the fiscal year ended June 30, 2019, management of TCERS contributed approximately \$1,058,000 less than the actuarially determined contribution, which amounted to 13.81% of covered payroll. Additionally, the significant actuarial assumptions and

Management's Discussion and Analysis - continued (Unaudited)

methods used to develop the contribution rate are listed.

The Schedule of Investment Returns shows the money-weighted rate of return (net of investment expense) to be 2.31% for fiscal year 2019. When compared to the expected rate of return of 6.75%, the actual return was lower during fiscal year 2019. This helps to understand the investment performance of TCERS. As with the other schedules above, ten-year information about the money-weighted rate of return will be reported once that data becomes available.

Actuarial Assumptions and Methods

An actuarial firm prepares two actuarial valuations: one for funding purposes and the other for accounting purposes.

The June 30, 2019 funding actuarial valuation is used to determine the level of annual required contributions (ARC) based on actuarial assumptions approved by the TCERS Board of Trustees. The Plan's Actuary utilized the Entry Age Normal Cost Method to calculate the plan's Actuarial Accrued Liability (AAL). The actuarial value of assets is compared to the actuarial accrued liability, resulting in either an unfunded actuarial accrued liability or a surplus. The June 30, 2019 funding valuation determined the funding ratio to be 78%, leaving an unfunded actuarial accrued liability (UAAL) of 22%. The UAAL is allocated on a level basis over the future earnings of members who are still employed as of the valuation date. Actuarial gains and losses are reflected in the actuarially determined contribution rate. The main funding actuarial assumptions and methods include:

- The assumed rate of return on investment is 7.25%. Prior to July 1, 2016, the assumed rate of return on investment was 7.75%.
- The mortality assumption is the RP-2014 Employee, Healthy Annuitant and Disabled mortality tables, male and female rates. The healthy mortality rates are projected generationally from 2006 using the MP-2017 scale.
- A salary scale is used to estimate salaries for plan members. The salary scale has different percentage increases based on the employee's current age. There is a separate, defined inflation and merit/promotion component for each projected salary increase. Effective July 1, 2012, the salary scale was decreased by 1% at all ages.
- No provision has been made for automatic post-retirement cost of living adjustments. (This is consistent with plan provisions, which do not provide automatic post-retirement cost of living adjustments).
- The actuarial value of assets is based on the five-year expected return method which employs a technique known as "smoothing".
- Effective July 1, 2018, each year's change in unfunded accrued liability is amortized as a separate layer on a closed basis over 20 years as a level percent of pay. The unfunded accrued liability that existed prior to July 1, 2018, will continue to be amortized on a closed basis over 30 years from July 1, 2003 as a level percent of pay.

The actuarial valuation performed for plan year beginning July 1, 2019, for accounting purposes was done in accordance with GASB 67. This valuation was used to determine the Total Pension Liability (TPL) with pension expense to be recognized by Tulsa County and its component units. The Total Pension Liability (TPL) differs somewhat from the Actuarial Accrued Liability (AAL) in that it measures the present value of projected benefit payments attributed to past periods of member service in accordance with specific requirements of GASB 67. One of those requirements relates to the determination of the discount rate. The discount rate for TCERS, as determined in accordance with GASB 67, was the same as the expected long-term rate of return or 7.25%. Another requirement in determining the Total Pension Liability (TPL) is the use of the Entry Age Normal Cost Method which is the same method that is used for funding purposes. Consequently, the AAL was \$389,820,389 and the TPL was \$412,726,939 as of June 30, 2019. However, the determination of annual pension expense in accordance with GASB 67 differs significantly from the amount of actual employer

Management's Discussion and Analysis - continued (Unaudited)

contributions. Each component of pension expense is detailed in the required supplementary Schedule of Changes in Net Pension Liability described in the previous section. In addition, the Net

Pension Liability (NPL), as determined in accordance with GASB 67, differs from the Unfunded Actuarial Accrued Liability (UAAL) that was determined by the funding valuation described in the paragraph above. The main difference relates to the way plan assets are valued. For accounting purposes, plan assets are valued at fair market value and not valued using the actuarial method (which employs a technique known as smoothing) that is used for funding. Consequently, the net pension liability (NPL) used for accounting purposes was \$123,645,746, while the unfunded actuarial accrued liability (UAAL) was \$84,540,487. At June 30, 2019, the NPL was greater than the UAAL.

Asset Allocation

The portfolio mix based on the total fair value of investments at the end of fiscal year 2019 is: 3.78% in money market mutual funds, 24.37% in Domestic corporate bonds and bond mutual funds, 23.27% in U.S. Government & Agency Obligations and Treasury Bond Mutual Funds, 19.71% in core domestic equities, 18.25% in small/mid (smid) cap equity securities, 9.03% in international equities and 1.59% in judgments. The portfolio mix based on the total fair value of investments at the end of fiscal year 2018 is: 1.85% in money market mutual funds, 27.06% in Domestic corporate bonds and bond mutual funds, 21.16% in U.S. Government & Agency Obligations and Treasury Bond Mutual Funds, 16.25% in core domestic equities, 21.87% in small/mid (smid) cap equity securities, 9.44% in international equities and 2.37% in judgments. The targeted portfolio mix is 46.5% equity and 53.5% fixed income. The retirement system's portfolio is currently 43% equity, 6% master limited partnerships and 51% fixed income.

At fiscal year end, the Fund was allocated 32.9% to domestic equity, 9.7% to international equity, 16.1% to core fixed income, 16% to intermediate fixed income, 9.7% to high yield fixed income, 6.5% to active duration fixed income, 5.9% to Master Limited Partnerships and 3.1% to cash. Since the target portfolio has no targeted value for either cash or judgments, the actual asset allocation of stocks, bonds, and cash will likely vary from the targeted portfolio percentages.

Net investment income amounted to \$6,612,045 during fiscal year 2019, while total contributions added \$13,078,385. The net depreciation in fair value of investments as of June 30, 2019, was (\$916,690). Net investment income compared to total investments as of June 30, 2019, is 2.29%.

Market environment and results

Investment market conditions continued to be volatile during the fiscal year ended June 30, 2019. The net position restricted for pensions of the TCERS decreased from \$291 million to \$289 million (-0.81%) from July 1, 2018 to June 30, 2019. Over the ten-year period ended June 30, 2019, the funding ratio has varied from a low of 74% to a high of 88%; the current funding ratio of 78% reflects the effects of the continuous market volatility.

Major Initiatives

Effective July 1, 2006, the Board of County Commissioners (BOCC) and the Board of Trustees (Board) repealed the military service credit previously created by the Employees' Retirement System of Tulsa County and left in force the military service credit created by State Statute pursuant to 19 O.S. Section 956.

Effective May 29, 2007, the BOCC and the Board approved a resolution allowing retirees to return to work for Tulsa County on a part-time basis after the first month of retirement and remain eligible for retirement benefits, as permitted by 19 O.S. 2007, Section 956, as amended.

Management's Discussion and Analysis - continued (Unaudited)

Beginning July 1, 2007, the total employer and employee contributions shall not exceed 16.5% of the monthly compensation of each member, as permitted by 19 O.S. 2007, Section 954, as amended.

Effective July 1, 2008, the actuarial assumption of the effective rate of return on investments was reduced from 8% to 7.75%.

On April 26, 2010, the BOCC and the Board adopted a new Schedule of Benefit Percentage by Years of Credited Service and set the spousal benefits at 67% for employees who are not vested as of June 30, 2010 and for employees who are hired after June 30, 2010.

Effective July 1, 2010, the BOCC and the Board approved a resolution changing the employer contribution rate to 14% and the employee-member contribution rate to five basis points (.05%) of the employee's base salary.

Effective July 1, 2012, the BOCC and the Board approved a resolution changing the employee-member contribution rate from five basis points (0.05%) to twenty-five basis points (0.25%) of the employee's base salary.

Effective July 1, 2012, the BOCC and the Board approved a resolution to make the employee contribution a pre-tax basis.

Effective July 1, 2013, the BOCC and the Board approved a resolution changing the employee-member contribution rate from twenty-five basis points (0.25%) to one percent (1%) of the employee's base salary.

On March 6, 2014, the Internal Revenue Service issued a favorable determination letter on the plan. The letter expired on January 31, 2019. The IRS has since discontinued the renewal of the determination letters.

In October 2014, the Board implemented a Funding Policy to ensure the Fund is fully funded.

On October 19, 2015, the BOCC and the Board approved a resolution changing the employee-member contribution rate from one percent 1% to 1.50% of the employee's base salary, effective January 1, 2016 and effective July 1, 2016 an increase from 1.50% to 2% of the employee's base salary. Effective July 1, 2017, the employee-member contribution rate increased from 2% to 2.5% of the employee's base salary.

Effective with the July 1, 2016 actuarial study, the actuarial assumption of the effective rate of return on investments was reduced from 7.75% to 7.25%.

Effective July 1, 2017, the BOCC and the Board approved a resolution to change the current retirement age from 62 to age 65, to replace the Rule of 80 with Rule of 90, and the early drawing percentages were decreased for employees hired after June 30, 2017.

Beginning July 1, 2019, the total employer and employee contributions shall not exceed 18.5% of the monthly compensation of each member, as permitted by 19 O.S. 2007, Section 954, as amended.

Effective July 1, 2019, the BOCC and the Board approved a resolution changing the employer contribution rate from 14% to 15%. Effective January 1, 2020, the employee-member contribution rate will increase from 2.5% to 3.5% of the employee's base salary.

The Board of Trustees continues to fulfill their mission to maintain stability while earning a competitive yield on the assets of the TCERS. Of utmost importance to the Trustees is to assure that required reserves are available for payment of current and prospective retirement benefits.

Management's Discussion and Analysis - continued
(Unaudited)

Contacting the Retirement System's Financial Management

This financial report is designed to provide citizens, taxpayers, plan members and others with a general overview of the TCERS finances and to show accountability for money it receives, disburses, and is entrusted with. Questions concerning any data provided in this report or requests for additional information should be directed to Tulsa County Clerk, Tulsa County Employees' Retirement System, 500 South Denver, Tulsa, Oklahoma 74103.

Statements of Fiduciary Net Position

For Fiscal Years ended June 30, 2019 and 2018

	2019	2018
Assets:		
Cash	\$ 392,839	\$ 468,191
Receivables:		
Interest and dividends	959,818	1,066,366
Due from brokers for unsettled trades	942,806	640,269
Contributions from employer/employees	<u>1,064,719</u>	<u>1,048,870</u>
Total receivables	<u>2,967,343</u>	<u>2,755,505</u>
Investments, at fair value:		
Money market mutual funds	10,882,676	7,685,659
U.S. Government and Agency obligations and Treasury bond mutual funds	66,939,656	61,293,960
Domestic corporate bonds and bond mutual funds	66,507,316	73,308,025
Foreign bonds and obligations	3,608,619	5,091,363
Domestic equities	109,202,733	108,091,378
International equities	25,974,705	27,359,739
Judgments	<u>4,581,667</u>	<u>6,874,122</u>
Total investments	<u>287,697,372</u>	<u>289,704,246</u>
Total assets	<u>291,057,554</u>	<u>292,927,942</u>
Liabilities:		
Accounts payable and accrued expenses	145,474	162,583
Due to brokers for unsettled trades	<u>1,830,887</u>	<u>1,313,014</u>
Total liabilities	<u>1,976,361</u>	<u>1,475,597</u>
Net position restricted for pensions	<u>\$ 289,081,193</u>	<u>\$ 291,452,345</u>

The accompanying notes are an integral part of these financial statements.

Statements of Changes in Fiduciary Net Position

For Fiscal Years ended June 30, 2019 and 2018

	2019	2018
Additions:		
Member contributions	\$ 1,974,991	\$ 1,922,350
Employer contributions	11,103,394	10,817,651
	<u>13,078,385</u>	<u>12,740,001</u>
Investment Income:		
Interest	3,633,673	3,536,854
Dividends	4,968,437	4,110,138
Net appreciation (depreciation) in fair value of investments	(916,690)	9,303,558
	<u>7,685,420</u>	<u>16,950,550</u>
Less investment expense:	<u>1,073,375</u>	<u>1,120,785</u>
	1,073,375	1,120,785
Net investment income	6,612,045	15,829,765
Total additions	<u>19,690,430</u>	<u>28,569,766</u>
Deductions		
Benefits	21,805,708	21,060,579
Administrative expense	95,999	140,364
Refunds of contributions	159,875	67,540
	<u>22,061,582</u>	<u>21,268,483</u>
Total deductions	<u>22,061,582</u>	<u>21,268,483</u>
Net increase (decrease)	(2,371,152)	7,301,283
Net position restricted for pension		
Beginning of Year	<u>291,452,345</u>	<u>284,151,062</u>
End of Year	<u>\$ 289,081,193</u>	<u>\$ 291,452,345</u>

The accompanying notes are an integral part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS JUNE 30, 2019 AND 2018

1. PLAN DESCRIPTION

A. Administration

The Tulsa County Employees' Retirement System (TCERS) is a single-employer defined benefit retirement plan. It was established July 1, 1965 by Resolution of the Tulsa County Board of County Commissioners (BOCC), as authorized by Title 19 OSA 951 through 965 of the Oklahoma Statutes. The TCERS was established to encourage continuity of dedicated service on the part of the employees and to promote public efficiency.

The operation of the TCERS is governed by the Oklahoma Statutes and the responsibility for its administration (including establishing or amending benefit provisions) rests with a nine-member Board of Trustees. Ex-Officio members include the Tulsa County Clerk, the Tulsa County Treasurer, and the Chairman of the Tulsa County Board of County Commissioners. Two members are appointed by the Chairman of the Board of County Commissioners subject to the approval of the entire Commission Board. Three members, who must be current employees, are elected at large from all participating employees. The final member, who must be retired and drawing benefits, is also elected at large from all participating employees and members. Effective July 1, 2003, retired members and beneficiaries of the system shall be allowed to vote in the election in which their representative is elected. All four are elected for three-year terms. Trustees meet the last Tuesday of each month at 10:30 a.m. in Room 338 of the Ray Jordan Tulsa County Administration Building, unless otherwise noted on the annual meeting notice filed in the County Clerk's office prior to December 15 and posted on the tulsacounty.org website. All meetings are open to any interested party and are conducted in accordance with the Oklahoma Open Meetings Act.

B. Participating Entities and Departments

The participating entities and departments of the TCERS are as follow:

Tulsa County	Oklahoma State University Extension Agency Center
Court Fund	Tulsa Area Emergency Management Agency (civil defense)
Drainage District #12	Tulsa City/County Health Department
Law Library	Tulsa County Public Facilities Authority (fairgrounds)

Membership in the TCERS is mandatory for all eligible employees. An employee becomes eligible on the first day of employment as a regular, full-time employee. Oklahoma Statutes include elected and appointed salaried County officials as employees for retirement system purposes. No seasonal, temporary, hourly, part-time or contracted worker is eligible to be a member of the TCERS.

C. Number of Members

As of June 30, 2019, and 2018, the TCERS members are as follows:	2019	2018
Retirees and beneficiaries receiving benefits	1,297	1,274
Terminated employees entitled to benefits not yet received	653	617
Current active employees:		
Fully vested	954	956
Nonvested	<u>849</u>	<u>780</u>
Total members	<u>3,753</u>	<u>3,627</u>

D. Benefits Paid to Members

Benefits are determined by multiplying the average of the highest paid three years of annual salary times a percentage based on the years of credited service at the date of retirement. A member is fully vested after five years of full-time service as a regular employee. The five-year period is not required to be continuous. Unreduced benefits may be received at age 62. A member may also be eligible for full benefits under the Rule of 80 in which the total service time and employee's age equals 80. The TCERS allows an employee who has attained age 55 with at

NOTES TO THE FINANCIAL STATEMENTS (continued)

least five years of credited service the opportunity to draw retirement benefits at an actuarially reduced percentage from the normal rate at age 62. For employees hired after June 30, 2017, unreduced benefits may be received at age 65. A member may also be eligible for full benefits under the Rule of 90 in which the total service time and employee's age equals 90. The TCERS allows an employee who has attained age 55 with at least five years of credited service the opportunity to draw retirement benefits at an actuarially reduced percentage from the normal rate at age 65. The TCERS also provides additional benefits to active members upon disability and to the surviving spouse upon death of the retiree.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of Accounting

The accompanying financial statements are prepared using the accrual basis of accounting and in conformity with accounting principles generally accepted in the United States of America. Member and employer contributions are recognized as revenues in the period in which employee services are performed, and expenses are recorded when incurred regardless of when payment is made. Contributions from members are recognized when the employer makes payroll deductions from plan members. Employer contributions are recognized when due and the employer has made a formal commitment to provide the benefits. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan. Subsequent events have been reviewed through November 12, 2019.

B. Method Used to Value Investments

Investments are reported at fair value. The fair value of investments is based on published market prices and quotations from major investment brokers at current exchange rates, as available. Many factors are considered in arriving at that value. Corporate bonds are valued based on yields currently available on comparable securities of issuers with similar credit ratings.

Approximately 23% and 21% of the net position restricted for pensions for both June 30, 2019 and 2018, respectively, was invested in U.S. Government and Agency obligations and Treasury bond mutual funds. The TCERS has no investments in stocks and bonds of any commercial or industrial organization whose market value equals 5% or more of TCERS's assets available for benefits.

C. Basis of Presentation

The financial statements of the TCERS are presented in accordance with the generally accepted accounting principles promulgated by the Governmental Accounting Standards Board (GASB).

The TCERS is considered a pension trust fund in Tulsa County's Comprehensive Annual Financial Report and is a blended component unit of Tulsa County. Copies of Tulsa County's Comprehensive Annual Financial Report are available from the County Clerk's office.

D. Administration Fees

Administrative expenses are paid for by the plan from contributions received and investment earnings.

E. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and additions and deductions during the period reported. Actual results could differ from those estimates.

3. CONTRIBUTIONS

Title 19 OSA 954 of the Oklahoma Statutes provides for annual contributions to be made by Tulsa

NOTES TO THE FINANCIAL STATEMENTS (continued)

County for amortizing any net pension liability. The Board of Trustees of the TCERS recommends to the Board of County Commissioners, the percentage of the employer and employee's contribution level to be contributed to the retirement system. The Board of County Commissioners, within the limits allowed by law, establishes both the employer and employee levels of contributions to support the retirement system.

Beginning July 1, 2019, the total employer and employee contributions shall not exceed 18.5% of the monthly compensation of each member.

An actuarial study determines the contribution required to fund the retirement system. The study calculates the current contribution amount required to pay the benefits of present and future retirees. The maximum contribution rate for employees shall not exceed the contribution rate of the County.

For 2019 and 2018, the County's contribution rate was 14% of the employee's base salary, and the employee contribution rate was 2.5% of the employee's base salary per month. Effective July 1, 2019, the BOCC and the Board approved a resolution changing the employer contribution rate from 14% to 15%. Effective January 1, 2020, the employee-member contribution rate will increase from 2.5% to 3.5% of the employee's base salary.

There are no legally required reserve accounts as of June 30, 2019 or 2018.

4. DEPOSITS AND INVESTMENTS

A. Deposits

At June 30, 2019, and 2018, the TCERS's cash balance was \$392,839 and \$468,191, respectively, and was maintained in a demand account in the Retirement System's name at BOK Financial.

Custodial credit risk for deposits is the risk that in the event of bank failure, TCERS's deposits may not be returned or the TCERS may not be able to recover collateral securities in the possession of an outside party. According to Title 62 OSA 517.4, Security for Local Public Deposits Act, the amount of the collateral securities or instruments to be pledged for the security of public deposits shall be established by the treasurer of the public entity. The Tulsa County Treasurer with the approval of the TCERS requires deposits to be 110% secured by collateral valued at market or par, whichever is lower, less the amount of Federal Deposit Insurance Corporation (FDIC) insurance. BOK Financial has placed the required collateral securities in a restricted account at a Federal Reserve Bank which serves Oklahoma. The market value of pledged securities shall be provided not less than quarterly to the treasurer by either the financial institution holding the deposit or the financial institution holding the collateral securities, which market value must have been obtained from an independent, recognized, and documented source. TCERS's deposits are not exposed to custodial credit risk because the deposits are insured by FDIC insurance and are collateralized.

B. Investments

Investments of TCERS funds are governed by Title 19 OSA 953.1A, as amended, of the Oklahoma Statutes. The Oklahoma Statutes place no limitations or restrictions on the choice of investment vehicles other than those a prudent investor would select. The Board of Trustees has retained five outside investment management firms to manage five different portfolios for the TCERS except for certain judgments against Oklahoma government entities and a small amount of cash. BOK Financial is the custodian of cash and investments. TCERS's investment securities are not exposed to custodial credit risk because all securities are held by a third-party custodian rather than a counterparty and are carried in street name.

NOTES TO THE FINANCIAL STATEMENTS (continued)

As of June 30, 2019, and June 30, 2018, the composition of the retirement system's investments is shown in the following tables:

June 30, 2019	Fair Value	Cost	Average Credit Quality/ Rating (1)	Weighted Average Number of Years to Maturity (2)
Money Market Mutual Funds	\$ 10,882,676	\$ 10,882,676	AAA	0
U.S. Treasuries	47,105,891	43,653,746	N/A	16.09
U.S. Agency Obligations				
FHMS (collateralized Mtg Obligation)	1,653,676	1,578,091		
FHLMC (Freddie Mac)	4,666,932	4,562,810	N/A	4.90
FNMA (Fannie Mae)	10,196,733	10,132,348	N/A	5.34
GNMA (Ginnie Mae)	<u>3,316,424</u>	<u>3,300,687</u>	N/A	4.78
Total U.S. Agency Obligations	19,833,765	19,573,936		
Corporate Bonds & Bond Mutual Funds	70,115,935	69,790,660	BBB	5.42
Domestic equities	109,202,733	75,438,552	N/A	N/A
International equities	25,974,705	21,507,176	N/A	N/A
Judgments	4,581,667	4,581,667	N/A	N/A
Total Investments	\$287,697,372	\$245,428,413		

June 30, 2018	Fair Value	Cost	Average Credit Quality/ Rating (1)	Weighted Average Number of Years to Maturity (2)
Money Market Mutual Funds	\$ 7,685,659	\$ 7,685,659	AAA	.10
U.S. Treasuries	45,360,158	45,024,513	N/A	16.00
U.S. Agency Obligations				
FHMS (collateralized Mtg Obligation)	1,357,024	1,416,190		
FHLMC (Freddie Mac)	1,911,465	1,953,775	N/A	8.20
FNMA (Fannie Mae)	8,999,515	9,283,666	N/A	7.10
GNMA (Ginnie Mae)	<u>3,665,798</u>	<u>3,748,537</u>	N/A	4.80
Total U.S. Agency Obligations	15,933,802	16,402,168		
Corporate Bonds & Bond Mutual Funds	78,399,388	79,899,182	A-	6.50
Domestic equities	108,091,378	62,118,632	N/A	N/A
International equities	27,359,739	21,295,118	N/A	N/A
Judgments	6,874,122	6,874,122	N/A	N/A
Total Investments	\$289,704,246	\$239,299,394		

- (1) Ratings are provided where applicable to indicate **Credit Risk**. N/A indicates not applicable.
(2) **Interest Rate Risk** is estimated using weighted average years to maturity.

NOTES TO THE FINANCIAL STATEMENTS (continued)

As of June 30, 2019, and 2018, the retirement system had the following fixed income investments and maturities:

June 30, 2019	Fair Value	Investment Maturities (in Years)			
		Less than 1	1-5	6-10	More than 10
U.S. Treasuries and Treasury Bonds	\$ 47,105,891	2.84%	3.20%	10.74%	15.75%
U.S. Agencies (1)	19,833,765	.47%	4.12%	7.32%	2.89%
Corporate Bonds & Bond Mutual Funds	70,115,935	5.55%	22.75%	17.46%	6.92%
Totals	\$137,055,591	8.87%	30.06%	35.52%	25.55%
June 30, 2018	Fair Value	Investment Maturities (in Years)			
		Less than 1	1-5	6-10	More than 10
U.S. Treasuries and Treasury Bonds	\$ 45,360,158	.23%	9.40%	5.54%	14.61%
U.S. Agencies (1)	15,933,802	.47%	3.14%	9.54%	.340%
Corporate Bonds & Bond Mutual Funds	78,399,388	7.75%	29.35%	12.85%	6.79%
Totals	\$139,693,348	8.44%	41.89%	27.93%	21.73%

(1) Includes Government National Mortgage Association (GNMA) investments, which are explicitly guaranteed by the U.S. Government.

TCERS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. TCERS has the following recurring fair value measurements as of June 30, 2019 and 2018:

Investments Measured at Fair Value as of June 30, 2019	Fair Value Measurements Using			
	Total Assets	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Money Market Mutual Fund	\$ 10,882,676	\$ 10,882,676	\$ 0	\$ 0
Debt Securities:				
Short Term Investments	2,373,834	2,373,834	0	0
Treasury Bonds	23,001,908	23,001,908	0	0
Agency Bonds	19,833,765	0	19,833,765	0
Municipal Bonds	3,163,183	0	3,163,183	0
Corporate Bonds	38,521,802	0	38,521,802	0
Sovereign Debt	309,451	0	309,451	0
Foreign Corporate Bonds	3,299,168	0	3,299,168	0
Registered Investment Companies	<u>46,552,480</u>	<u>46,552,480</u>	<u>0</u>	<u>0</u>
Total Debt Securities	<u>137,055,591</u>	<u>71,928,222</u>	<u>65,127,369</u>	
Equity Securities:				
Common stock	85,429,925	85,429,925	0	0
Preferred stock	0	0	0	0
Miscellaneous equities	0	0	0	0
Common Collective Trusts	40,204,763	0	40,204,763	0
Alternative Investments - Infrastructure	<u>9,542,750</u>	<u>9,542,750</u>	<u>0</u>	<u>0</u>
Total Equity Securities	<u>135,177,438</u>	<u>94,972,675</u>	<u>40,204,763</u>	<u>0</u>
Judgments	4,581,667	0	0	4,581,667
Total Investments	<u>\$287,697,372</u>	<u>\$177,783,573</u>	<u>\$105,332,132</u>	<u>\$4,581,667</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

Investments Measured at Fair Value as of June 30, 2018	Fair Value Measurements Using			
	Total Assets	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Money Market Mutual Fund	\$ 7,685,659	\$ 7,685,659	\$ 0	\$ 0
Debt Securities:				
Treasury Bonds	25,445,908	25,445,908	0	0
Agency Bonds	15,933,803	0	15,933,803	0
Municipal Bonds	3,377,687	0	3,377,687	0
Corporate Bonds	45,565,098	0	45,565,098	0
Sovereign Debt	293,286	0	293,286	0
Foreign Corporate Bonds	4,798,077	0	4,798,077	0
Registered Investment Companies	<u>44,279,489</u>	<u>44,279,489</u>	<u>0</u>	<u>0</u>
Total Debt Securities	<u>139,693,348</u>	<u>69,725,397</u>	<u>69,967,951</u>	<u>0</u>
Equity Securities:				
Common stock	92,709,673	92,709,673	0	0
Preferred stock	404,147	404,147	0	0
Miscellaneous equities	703,977	703,977	0	0
Common Collective Trusts	29,700,884	0	29,700,884	0
Alternative Investments - Infrastructure	<u>11,932,436</u>	<u>11,932,436</u>	<u>0</u>	<u>0</u>
Total Equity Securities	<u>135,451,117</u>	<u>105,750,233</u>	<u>29,700,884</u>	<u>0</u>
Judgments	6,874,122	0	0	6,874,122
Total Investments	<u>\$289,704,246</u>	<u>\$183,161,289</u>	<u>\$99,668,835</u>	<u>\$6,874,122</u>

Money market mutual funds, debt securities, equity securities, and alternative investments classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those investments. Debt and equity securities classified in Level 2 of the fair value hierarchy are valued using one of the following: a) quoted prices for similar, but not identical, assets or liabilities in active markets, b) quoted prices for identical or similar assets or liabilities in inactive markets, c) inputs other than quoted market prices that are observable, such as interest rate and yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates, and d) other inputs derived from or corroborated by observable market inputs. Other miscellaneous investments classified in Level 3 of the fair value hierarchy are valued using unobservable inputs to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. Unobservable inputs reflect TCERS's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). Unobservable inputs shall be developed based on the best information available in the circumstance, which might include TCERS's own data.

TCERS Investment Guidelines

The Board of Trustees of TCERS has formally adopted investment guidelines for the investment managers. The investment managers are expected to execute all transactions as efficiently as possible. There are no specific restrictions on portfolio turnover or preference for long or short holding periods. The Board does, however, anticipate that long-term performance will be enhanced by investment strategies, not trading strategies.

All securities transactions are affected through brokerage firms. The TCERS assets may be invested in publicly traded common and preferred stocks, convertible bonds, and non-convertible fixed income securities, whether interest bearing or discount instruments, including money market instruments, subject to any restrictions specifically outlined in the Statement of Investment Policies, Guidelines, and Objectives (Policy).

NOTES TO THE FINANCIAL STATEMENTS (continued)

The Board has adopted the following Asset Allocation among stocks, bonds, and cash to serve as a general guideline in investing the Plan's assets.

	Minimum	Target	Maximum
Domestic Equity	9.00%	32.50%	52.50%
Energy Infrastructure (MLPs)	0.00%	7.60%	17.60%
International Equity	0.00%	8.80%	18.80%
Bonds (maturity greater than 1 year)	10.40%	46.10%	86.40%
Real Estate	0.00%	5.00%	15.00%
Cash (maturity less than 1 year)	0.00%	0.00%	5.00%

TCERS's Risk Disclosures

Credit Risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Generally, the TCERS's investing activities are approved by the Board of Trustees and managed under the custody of the County Treasurer. Investing is performed in accordance with investment policies adopted by the Board of Trustees and complies with the Investment Policy adopted by the Board of County Commissioners and with State Statutes.

The TCERS Investment Policy designates a core fixed income portfolio and an intermediate fixed income portfolio. It allows, but does not require, each manager to invest up to 15% of their respective portfolios in bonds below "investment grade", but not lower than "B". Total fixed income exposure, from any single issuer except U.S. Government, its agencies, or instrumentalities, shall not exceed 7.0% of the total allocation of the portfolio, except below investment grade issuers, which shall not exceed 2.5% of the portfolio. Within the above parameters, the two fixed income managers have complete discretion as to credit rating.

As of June 30, 2019, the core fixed income portfolio had an average credit rating of Aa2, with 25% to Governments and Agencies, 37.1% in AAA rated bonds, 3.2% in AA rated bonds, 16.8% in A rated bonds and 17.9% in BBB rated bonds. The intermediate fixed income portfolio had an average credit rating of Aa3/AA-, with 30.3% to Governments and Agencies, 21.8% in AAA rated bonds, 7.5% in AA rated bonds, 17.7% in A rated bonds, and 19.3% in BBB rated bonds, 3.5% in BB rated issues.

Concentration of Credit Risk is the risk of loss attributed to the magnitude of the TCERS's investment in a single issuer. Excluding investments in Common Collective trust funds, the retirement system did not have any investments that exceed 5% of the total portfolio. The TCERS's investments that were below investment grade did not exceed 2.5% of the portfolio. U.S. Government securities are excluded from these restrictions. Equity fund managers are given the guideline that no single security in each manager's portfolio can constitute more than 5% of the portfolio's equity allocation at the time of purchase, nor can it be more than 7% of the equity allocation of the portfolio after accounting for price appreciation.

Interest Rate Risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments held for longer periods are subject to increased risk of adverse interest rate changes. TCERS's investment policy provides that to the extent practicable, investments are matched with anticipated cash flows. Investments are diversified to minimize the risk of loss resulting from over-concentration of assets in a specific maturity period, a single issuer, or an individual class of securities.

Foreign Currency Risk is the risk that changes in exchange rates will adversely affect the fair value of an investment. The Board of Trustees has stated in the Policy the guidelines for the international equity portfolio manager. The constraints on the international equity portfolio manager are to diversify internationally across the global equity markets. The international

NOTES TO THE FINANCIAL STATEMENTS (continued)

equity manager invests in only non-U.S. dollar denominated equity securities. The manager is required to invest in a prudent manner and to operate under the restrictions indicated in their prospectus. These include: regional constraints, diversification requirements and the type of securities held.

TCERS's international equity portfolio comprises 9% and 9.4% of the total portfolio investments at fair value as of June 30, 2019 and 2018, respectively. The managers of these portfolios do not hedge the foreign currency risk, and the Policy does not require it.

Pension Trust investing is restricted by Oklahoma Statutes to the Prudent Investor Rule.

TCERS's investments in foreign equities and debt securities are shown by monetary unit to indicate possible foreign currency risk. TCERS's exposure to foreign currency risk at June 30, 2019 and 2018 follows:

June 30, 2019		June 30, 2018	
	Equities		Equities
Danish Krone	\$ 516,062	Danish Krone	\$ 708,778
Euro	9,493,599	Euro	9,077,705
British Pound	1,825,194	British Pound	2,056,275
Hong Kong Dollar	197,020	Hong Kong Dollar	274,944
Japanese Yen	6,007,217	Japanese Yen	6,050,470
Swiss Franc	562,646	Swiss Franc	0
Swedish Krone	0	Swedish Krone	448,630
	<u>\$18,601,738</u>		<u>\$18,616,802</u>

International equities also included \$7,372,967 and \$8,742,937 in US dollar denominated investments which consisted primarily of American Depositary Receipts as of June 30, 2019 and 2018, respectively.

Appreciation (Depreciation) of TCERS's Investments

During the years ended June 30, 2019 and 2018, the TCERS's investments (including investments bought, sold and held during the year) appreciated or depreciated in value as follows:

	2019	2018
Net appreciation (depreciation) in fair value of investments:		
Corporate Bonds	\$ 1,078,377	\$(2,580,814)
U.S. Government & Agency	3,160,344	(1,876,719)
Domestic equities	(3,526,788)	12,895,614
International equities	<u>(1,628,623)</u>	<u>865,477</u>
Total net appreciation (depreciation) in fair value of investments	<u>\$ (916,690)</u>	<u>\$ 9,303,558</u>

For the years ended June 30, 2019 and 2018, realized gains on the sale of investments of \$7,219,202 and \$7,468,127, respectively, have been included in net appreciation or depreciation. The calculation of realized gains and losses is independent of the calculation of the changes in the fair value of investments. Realized gains and losses for 2019 and 2018 include unrealized amounts from the prior periods.

Rate of Return – For the year ended June 30, 2019, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 2.31%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts invested.

NOTES TO THE FINANCIAL STATEMENTS (continued)

5. NET PENSION LIABILITY OF THE COUNTY

The components of the net pension liability of the County at June 30, 2019 and June 30, 2018, follows:

	2019	2018
Total Pension Liability	\$412,726,939	\$379,190,526
Plan Fiduciary Net Position	<u>(289,081,193)</u>	<u>(291,452,345)</u>
County's Net Pension Liability	<u>\$123,645,746</u>	<u>\$ 87,738,181</u>
Plan Fiduciary Net Position as a percentage Of the total pension liability	70.04%	76.86%

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation for plan year beginning July 1, 2019, using the following actuarial assumptions, applied to all periods included in the measurement. Also presented are assumptions for the fiscal year ended June 30, 2018:

Valuation Date	July 1, 2019	July 1, 2018
Inflation	2.50%	2.50%
Salary increases including inflation	Age 20-34 5.0% Age 35-49 3.5% Age 50-70 2.5%	Age 20-34 5.0% Age 35-49 3.5% Age 50-70 2.5%
Mortality	Actives: RP-2014 Employees Mortality Table, male and female rates, with generational projection from 2006 based on the MP-2017 scale. Healthy Inactives: RP-2014 Healthy Annuitant Mortality Table, male and female rates, with generational projection from 2006 based on the MP-2017 scale. Disabled Inactives: RP-2014 Disabled Mortality Table, male and female rates.	Actives: RP-2014 Employees Mortality Table, male and female rates, with generational projection from 2006 based on the MP-2017 scale. Healthy Inactives: RP-2014 Healthy Annuitant Mortality Table, male and female rates, with generational projection from 2006 based on the MP-2017 scale. Disabled Inactives: RP-2014 Disabled Mortality Table, male and female rates.
Turnover	Crocker, Sarason and Straight T-7 rates, increased by 0.2 for the first year and 0.1 for the second year	Crocker, Sarason and Straight T-7 rates, increased by 0.2 for the first year and 0.1 for the second year.
Investment Rate of Return, compounded annually, includes inflation and net of investment expenses	7.25%	7.25%

Disability: Various rates based on age. Selected rates for both June 30, 2019 and June 30, 2018 are:

Age	Rate per 1,000	
	Male	Female
25	.106	.124
30	.128	.128
40	.173	.198
50	.226	.399
55	.366	.573
60	.492	.623
65	.570	.605

NOTES TO THE FINANCIAL STATEMENTS (continued)

Retirement Rate: At the following rates upon attaining age 62 with 5 years of participation or any age with 80 points or age 65 with 5 years of participation or any age with 90 points, if hired after June 30, 2017:

<u>Age</u>	<u>Rate</u>
Under 55	0%
55-64	20%
65-69	30%
70	100%

Marital Status: 85% are assumed to be married. Males are assumed to be four years older than their spouses.

The actuarial assumptions used in the June 30, 2019 valuation were based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2017. These assumptions were effective July 1, 2018.

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. The best-estimate range for the long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The capital market assumptions and portfolio standard deviation are per the Plan's independent investment consultant. Actual long-term historical results achieved by the Fund were also considered. 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, 2019 (see the discussion on the pension plan's investment policy) are summarized in the following table:

<u>Asset Class</u>	<u>Index</u>	<u>Current Allocation</u>	<u>Long-Term Expected Arithmetic Real Rate of Return</u>	<u>Long-Term Expected Geometric Real Rate of Return</u>
US Cash	BAML 3-Mon Tbill	3.10%	.68%	.68%
US Core Fixed Income	Barclays Aggregate	22.60%	1.70%	1.61%
US Intermediate Bonds	Barclays IT Gvt/Credit	16.00%	1.40%	1.33%
US High Yield Bonds	BAML High Yield	9.70%	3.91%	3.45%
US Large Caps	S&P 500	14.00%	4.45%	3.34%
US Mid-Caps	Russell MidCap	19.00%	4.85%	3.42%
Foreign Developed Equity	MSCI EAFE NR	9.70%	6.14%	4.63%
Master Limited Partnerships	Alerian MLP	5.90%	3.81%	2.59%

Discount rate. The discount rate used to measure the total pension liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and that County contributions will be made at 15%. Based on those 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.

NOTES TO THE FINANCIAL STATEMENTS (continued)

Sensitivity of the net pension liability to changes in the discount rate. The following presents the net pension liability of the County, calculated using the discount rate of 6.75%, as well as what the County's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate:

	1% Decrease <u>5.75%</u>	Current Discount Rate <u>6.75%</u>	1% Increase <u>7.75%</u>
Total pension liability	\$465,767,148	\$412,726,939	\$368,959,742
Fiduciary net pension	<u>289,081,193</u>	<u>289,081,193</u>	<u>289,081,193</u>
County's net pension liability	176,685,955	123,645,746	79,878,549

TULSA COUNTY EMPLOYEES' RETIREMENT SYSTEM
Administered by the Tulsa County Clerk

Required Supplementary Information

(Unaudited)

For Fiscal Year Ended

Schedule of Changes in Net Pension Liability and Related Ratios (\$ in 1,000s)

	Year Ended June 30,		2019	2018	2017	2016	2015	2014				
Total pension liability												
Service cost	\$	6,788	\$	6,422	\$	6,409	\$	6,073	\$	5,714	\$	5,635
Interest		27,201		25,420		24,721		24,740		23,398		22,703
Differences between expected and actual experience		(1,408)		6,401		(1,046)		438		(2,337)		(294)
Plan Changes		15		-		(238)		(470)		-		-
Changes of assumptions		22,907		7,494		-		18,308		7,382		(2,894)
Benefit payments, including refunds of member contributions		(21,966)		(21,128)		(19,342)		(18,165)		(17,208)		(16,252)
Net change in total pension liability		<u>33,537</u>		<u>24,609</u>		<u>10,504</u>		<u>30,924</u>		<u>16,949</u>		<u>8,898</u>
Total pension liability - beginning		<u>379,190</u>		<u>354,581</u>		<u>344,077</u>		<u>313,153</u>		<u>296,204</u>		<u>287,306</u>
Total pension liability - ending (a)		<u>\$ 412,727</u>		<u>\$ 379,190</u>		<u>\$ 354,581</u>		<u>\$ 344,077</u>		<u>\$ 313,153</u>		<u>\$ 296,204</u>
Plan fiduciary net position												
Contributions - employer	\$	11,103	\$	10,818	\$	10,847	\$	10,893	\$	10,459	\$	9,678
Contributions - member		1,975		1,922		1,542		969		743		688
Net investment income		6,612		15,830		24,595		221		523		41,471
Benefit payments, including refunds of member contributions		(21,965)		(21,129)		(19,342)		(18,165)		(17,208)		(16,252)
Administrative expense		(96)		(140)		(119)		(120)		(128)		(128)
Net change in plan fiduciary net position		<u>(2,371)</u>		<u>7,301</u>		<u>17,523</u>		<u>(6,202)</u>		<u>(5,611)</u>		<u>35,457</u>
Plan fiduciary net position - beginning		<u>291,452</u>		<u>284,151</u>		<u>266,628</u>		<u>272,830</u>		<u>278,441</u>		<u>242,984</u>
Plan fiduciary net position - ending (b)		<u>289,081</u>		<u>291,452</u>		<u>284,151</u>		<u>266,628</u>		<u>272,830</u>		<u>278,441</u>
Net pension liability - ending (a) - (b)		<u>\$ 123,646</u>		<u>\$ 87,738</u>		<u>\$ 70,430</u>		<u>\$ 77,449</u>		<u>\$ 40,323</u>		<u>\$ 17,763</u>
Plan fiduciary net position as a percentage of the total pension liability		70.04%		76.86%		80.14%		77.49%		87.12%		94.00%
Covered payroll		\$ 80,413		\$ 76,500		\$ 76,796		\$ 76,561		\$ 76,834		\$ 72,407
Net pension liability as a percentage of covered payroll		153.76%		114.69%		91.71%		101.16%		52.48%		24.53%

Notes to Schedule:

- Only the six most recent fiscal years are presented because 10-year data is not yet available.
- Actuarial Assumptions, Methods and Plan Provisions
The employer contribution rate was increased from 14% to 15% of base pay, effective July 1, 2019.
The employee contribution rate will be increased from 2.5% to 3.5% of base pay, effective January 1, 2020.
All other actuarial assumptions, methods and plan provisions remained the same as the prior year.

Required Supplementary Information
(Unaudited)
For Fiscal Year Ended

Schedule of Contributions from Employer

Fiscal Year Ending June 30	Actuarially determined contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2019	\$ 12,161,561	\$ 11,103,394	\$ 1,058,167	\$ 80,413,486	13.81%
2018	10,568,348	10,817,651	(249,303)	76,499,726	14.14%
2017	10,839,414	10,846,636	(7,222)	76,796,017	14.12%
2016	8,925,910	10,892,672	(1,966,762)	76,560,913	14.23%
2015	8,657,780	10,459,118	(1,801,338)	76,834,455	13.61%
2014	8,694,876	9,678,256	(983,380)	72,406,610	13.37%

Notes to Schedule:

1. Only the six most recent fiscal years are presented because 10-year data is not yet available.
2. Valuation Date: July 1, 2019, 2018, 2017, 2016, 2015 and 2014
3. Actuarially determined contribution rate is calculated as of June 30 prior to the end of the fiscal year in which contributions are reported
4. Methods and assumptions used to determine contribution rates:
 - Actuarial cost method - Entry age normal
 - Amortization method - Level percent of payroll, layered
 - Remaining amortization period at July 1, 2019 - 20 years (14 year closed period for unfunded accrued liability as of July 1, 2017)
 - Asset valuation method - Actuarial:
 - Smoothing period - 5 years
 - Recognition method - Non-asymptotic
 - Corridor - 80% - 120%
 - Inflation - 2.5%
 - Salary increases - 5% grading down to 2.5%
 - Investment rate of return - 7.25% as of July 1, 2019, 2018, July 1, 2017 and July 1, 2016 and 7.75% as of July 1, 2015 and 2014

Required Supplementary Information
(Unaudited)
For Fiscal Year ended

Schedule of Investment Returns

Year ended June 30,	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	2.31%	5.66%	9.36%	0.08%	0.19%	17.29%

Note to Schedule:

Only the six most recent fiscal years are presented
because 10-year data is not yet available.

Supporting Schedules for Financial Section

**Schedule of Administrative Expenses
For Year Ended June 30, 2019**

Professional Services:		
Actuarial	\$ 0	
Audit	18,500	
Legal	<u>5,750</u>	
Total Professional Services		24,250
Other Administrative Expenses:		
Fiduciary Liability Insurance	\$ 35,160	
Printing and postage	5,461	
Travel and Training	1,250	
Software Maintenance	27,430	
Miscellaneous	<u>2,448</u>	
Total Other Administrative Expenses		<u>71,749</u>
Total Administrative Expenses		\$ <u>95,999</u>

**Schedule of Investment Expenses
For Year Ended June 30, 2019**

Investment Managers

Barrow, Hanley, Mewhinney & Strauss (fixed income)	\$ 111,794	
Barrow, Hanley, Mewhinney & Strauss (mid-cap equity)	312,643	
Chickasaw Capital Management	189,909	
Segal Bryant & Hamill	104,979	
State Street Global Advisors	7,543	
Tocqueville Asset Management	<u>220,119</u>	
Total Investment Managers		946,987

Independent Financial Consultant

AndCo	\$ <u>80,000</u>	
Total Independent Financial Consultant		80,000

Other Investment Expenses

BOK Financial bank custody fees	\$ 48,707	
Less Commission Recapture	<u>(2,319)</u>	
Total Other Investment Expenses		46,388
Total Investment Expenses		\$ <u>1,073,375</u>

**Schedule of Payments to Consultants
For Year Ended June 30, 2019**

<u>Individual or firm</u>	<u>Commission/Fee</u>	<u>Nature of Service</u>
Milliman	\$ 0	Actuary

For information on fees paid to investment professionals please refer to the Schedule of Investment Expenses. The payment to Milliman is also included in the Schedule of Administrative Expenses.



**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 *Government Auditing Standards***

To the Board of Trustees
Tulsa County Employees' Retirement System

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 governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of Tulsa County Employees' Retirement System (the System) as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the System's basic financial statements, and have issued our report thereon dated November 12, 2019.

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 opinions 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 over financial reporting was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over financial reporting that might be material weaknesses or significant deficiencies. Given these limitations, during our audit, we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Tulsa County Employees' Retirement 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.

Tulsa, Oklahoma
November 12, 2019

Stanfield + O'Dell, P.C.