



Annual Comprehensive

FINANCIAL REPORT

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

A COMPONENT UNIT OF THE STATE OF OKLAHOMA
FOR THE FISCAL YEAR ENDED JUNE 30, 2023



OKLAHOMA
Teachers' Retirement System



OKLAHOMA

Teachers' Retirement System

Mission Statement

We collect, protect, and grow assets to provide a secure retirement income for public education employees.

Vision

The vision of the Teachers' Retirement System of Oklahoma is to:

- Provide quality service to our members in an efficient, economical manner,
- Provide our members on-demand and accurate access to their personal financial information,
- Educate our members about their retirement benefits,
- Manage the assets of the plan competently and prudently while achieving long-term risk-adjusted net returns in excess of market benchmarks as identified in the Board's Investment Policy, as well as exceeding the actuarial assumed return, and
- Inform our members about the financial status of TRS so they will be confident in our ability to provide their benefits.

Core Values

- **Collaborate:** We work cooperatively to empower each employee to achieve our vision and mission while embodying our core values.
- **Expertise:** We equip our staff, through training and development, to guide our members and employers through all aspects of pension participation.
- **Care:** We are open, responsive, and ethical as we engage with all our stakeholders.
- **Sustainable Funding:** We recognize the vital role a properly funded pension plan plays in the lives of our members and their families and the profound impact of paying benefits on Oklahoma's economy.
- **Reputation:** We take pride that TRS is known for the superior quality of its services, and we strive to continuously improve.



OKLAHOMA
Teachers' Retirement System

A component unit of the State of Oklahoma
Annual Comprehensive Financial Report
for the fiscal year ended June 30, 2023

Prepared by TRS Administrative, Finance and
Investment Departments

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Introductory Section

MISSION

We collect, protect, and grow assets to provide a secure retirement income for public education employees.





J. KEVIN STITT
GOVERNOR

SARAH GREEN
EXECUTIVE DIRECTOR

Teachers' Retirement System of Oklahoma
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Oklahoma City, OK 73152-3524
TRS Member Services: 877-738-6365 (toll-free)
or 405-521-2387 (OKC)
Fax: 405-522-1534

December 18, 2023

The Board of Trustees and Members
Teachers' Retirement System of Oklahoma
301 NW 63rd Street Suite 500
Oklahoma City, OK 73116

Letter of Transmittal:

We are honored to present the 2023 Annual Comprehensive Financial Report (ACFR) of the Teachers' Retirement System of Oklahoma (the System) for the fiscal year beginning July 1, 2022 and ending June 30, 2023. The information included in this report not only defines our purpose, but also represents our commitment to protecting the financial future of our more than 200,000 members. We accomplish this by monitoring and evaluating our daily operations as well as prudently managing the \$20.85 billion of net assets in the fund. The Teachers' Retirement System of Oklahoma is a component unit of the state of Oklahoma.

Profile of System

The Teachers' Retirement System began operations on July 1, 1943. The System provides retirement allowances and other benefits to public education employees in the common schools, career technology centers, colleges and universities, and other local and state educational agencies of the state of Oklahoma.

The mission of the System is "We collect, protect, and grow assets to provide a secure retirement income for public education employees." The System also strives to provide outstanding customer service to all our active and retired members. All services provided by the staff are performed to meet these objectives.

Major Initiatives

Communication

Our relationship with our members begins when they first enter the education profession and extends through their retirement. We are continually looking for avenues to serve as a resource and communicate the benefits of our System with our membership throughout their careers. We are also working to serve as an elite resource for all external stakeholders of our System.

Digital Transformation and Cybersecurity

In recent years, TRS has developed updated processes and continues to improve upon technological advances giving our members better access to their membership information while maintaining security. To better serve our membership, we are modernizing our pension administration system – a project anticipated to span the next three to five years – which includes improving functionality of our administration, employer, and member portals while also enhancing security of each portal.

Organizational and Operational Strength

In conjunction with the modernization of our pension administration system, we are looking for ways to streamline our operations and increase efficiencies among staff. We are working diligently to create a flexible and enjoyable working environment for our staff – who administer the System with high efficiency – while maintaining a high level of customer service. In addition, we are focusing our efforts on employee retention, succession planning, and business continuity.

Management Responsibility

Management is responsible for maintaining a system of adequate internal accounting controls designed to provide reasonable assurance that transactions are executed in accordance with management's general or specific authorization and are recorded as necessary to maintain accountability for assets and to permit preparation of financial statements in accordance with generally accepted accounting principles. This system includes written policies and procedures. Responsibility for the preparation, accuracy, completeness, and fairness of this presentation, including all disclosures, rests firmly with the System's management. To the best of our knowledge and belief, this financial report is complete and reliable in all material aspects.

The System maintains a comprehensive internal control framework designed to assure that assets are safeguarded from theft or misuse, transactions are completed accurately, and financial statements are fair and reliable. Internal control is designed to provide reasonable assurance, but not absolute assurance, that these objectives are met. The concept of reasonable assurance recognizes first that the cost of a control should not exceed the benefits likely to be derived, and second, the valuation of cost and benefits requires estimates and judgments by management. The System has its own internal audit program and uses a private firm retained by the Board of Trustees that reports directly to the Board. The firm not only analyzes financial issues and risk, but also provides advice on workflow and internal processes improvements.

The System operates according to an administrative budget approved annually by the Board. Although revenue is not appropriated from the state's General Revenue Fund, the budget is submitted to the Legislature as part of the Governor's recommended budget. The System operates under the same budgetary controls that apply to all state agencies.

The basic financial statements are prepared in accordance with generally accepted accounting principles as promulgated by the Governmental Accounting Standards Board. An independent auditing firm, Eide Bailly LLP, has audited the financial statements included in this report and its opinion letter is presented in the Financial Section of this ACFR. Readers are encouraged to review the Management's Discussion and Analysis (MD&A) in the Financial Section for an in-depth discussion of the financial statements and the cause and effect of market conditions, legislation and changes in operations affecting the System's financial results.

Economic Condition and Outlook

In fiscal year 2023, global markets were calmed by slowing month-over-month inflation that emerged in the post-COVID environment. Annual CPI inflation at the end of the fiscal year was 3.0%, down from a peak of 9.1% in June 2022. Markets began rewarding investors as the potential end of the Federal Reserve interest rate hikes became clearer.

Domestic and International equity markets were broadly positive during the fiscal year. The Russell 3000, a broad U.S. stock index, posted a return of +18.95%. The MSCI ACWI ex-U.S. IMI, a broad international benchmark of investable markets, returned +12.47%.

The Bloomberg Global Aggregate, a broad global bond index declined returning -1.32%. The Bloomberg U.S. Aggregate index, a broad index of U.S. government and corporate bonds returned -0.94% in fiscal year 2023.

Commodity prices in aggregate receded as global supply chains recovered post-pandemic. The Bloomberg Commodity index, a broad global commodity index, declined -9.61%. WTI, a measure of U.S. oil prices, ended the fiscal year at \$70.31 per barrel, down from \$114.68 per barrel the previous year.

For fiscal year 2024, investors will continue focusing on whether the Federal Reserve can tame inflation without doing significant damage to the economy. Looking abroad, investors will be devoting attention to the war in Ukraine, the Middle East, geopolitical tensions with China, and the strength of the European and Chinese economies.

Investments

For fiscal year 2023, the System portfolio earned an 8.04% rate of return, underperforming its benchmark return of 12.14% but still exceeding the System's assumed rate of return of 7.0%. The total fair value of the portfolio at the June 30 fiscal year end was \$20.85 billion. Relative to a peer group of U.S. Public Pension Plans with assets over \$1 billion, the Fund's performance placed above median in the 39th percentile.

On June 30, 2023, the System's investment portfolio mix at fair value was 58.9% equities, 23.7% fixed income, 7.8% real estate, 7.3% private equity, 1.0% private debt, and 1.3% cash. As fiduciaries for the retirement funds, the Board of Trustees is responsible for investment of the funds under the prudent investor standard. This standard proscribes that the System maintain a diversified portfolio and that trust funds are diversified across an array of asset classes. The Board of Trustees has elected to allocate investments to domestic and international publicly traded equities, as well as publicly traded government, corporate and structured fixed income securities. In addition to publicly traded equity and fixed income investments, the Board has further diversified the portfolio to include private real estate, private equity, and private credit. The Board retains professional investment management firms to achieve these diversified exposures.

Returns across publicly traded asset classes were positive while private asset classes, due in part to valuation lags, were negative. The System's domestic equity composite earned a return of 15.4%, underperforming the benchmark return of 19.0% due to our overweight to small-cap securities. International equities returned 11.2%, falling short of the benchmark return of 13.1%, due to an overweight to small-cap securities. Total fixed income earned a return of 0.9%, declining more than the benchmark return of 2.0%, due to an overweight to long duration US treasury bonds. Private markets broadly declined due to a higher interest rate environment and a lack of deal-flow. Real estate investments returned -4.4% and private equity declined -3.2%.

Please see the Investment Section of this report for more detailed information on the performance of the portfolio.

Revenue and Funding

The major sources of revenue for the System are investment income, member contributions, employer contributions and dedicated revenue from the state of Oklahoma.

Active member contributions for fiscal year 2023 were \$371 million, which represents 6.96% of covered payroll. This compares to \$366 million for the fiscal year ending June 30, 2022. Member contributions include direct payments by members for active service, to reestablish service credit, purchase Oklahoma service, out-of-state or military service, and payments required to qualify for the Education Employees Service Incentive Plan (EESIP).

Contributions from local employers, including external grant matching contributions and dedicated revenue from the state of Oklahoma for fiscal year 2023 totaled \$1.027 billion, compared to \$967.4 million for fiscal year 2022. Contributions from local school districts on regular employees and federally or privately funded positions increased by \$17.2 million, and the state's dedicated revenue increased by \$42.1 million.

A properly funded pension plan continues to be the Board's most significant challenge. As of June 30, 2023, 75.1% of the System's actuarial liabilities were covered by the net position of the Plan. This is an increase from the 73.5% funded ratio reported for June 30, 2022. The increase in the funded ratio on the actuarial value of assets was primarily due to the level of actual contributions being higher than expected. Based upon the current statutory contribution schedule, the funding period is 12 years. This is a two year decrease of the funding period from 2022.

Expenses

The System's expenses are attributable to making retirement benefit payments including health insurance subsidies, death and survivor benefits, refunds of member contributions and administrative expenses. During fiscal year 2023, the System paid \$39.6 million more in retirement, survivor and insurance benefits than in the preceding year. The System also paid \$12.1 million more in refunds to active clients who terminated accounts. The increase in retirement and insurance benefits is attributable to a net increase in the number of retired members and the average benefit payments. Administrative expenses increased \$980 thousand, primarily due to an increase in payroll costs and expenses related to a pension administration system modernization project.

Awards

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Teachers' Retirement System of Oklahoma for its Annual Comprehensive Financial Report for the fiscal year ended June 30, 2022. This is the thirtieth consecutive year the System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the System must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. We believe that our current annual comprehensive financial report continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

In addition to the award for the ACFR, the System was awarded its eighth consecutive Certificate of Achievement for the Popular Annual Financial Report (PAFR). The purpose of this report is to be readily accessible and easily understandable to the public and other interested parties without a background in public finance.


Acknowledgements

This report reflects the combined efforts of the System's staff under the leadership of the Board of Trustees. It is intended to provide complete and reliable information as a basis for making management decisions, determining compliance with legal provisions, and for determining responsible stewardship of the assets contributed by the members and their employers.

Notice is being mailed to the Governor, members of the Oklahoma Legislature, and the Oklahoma State Pension Commission that the ACFR is available on our website at www.Oklahoma.gov/TRS.

We would like to take this opportunity to express our gratitude to you, the staff, the advisors, and other people who have worked so diligently to assure the continued successful operation of the Teachers' Retirement System of Oklahoma.

Respectfully submitted,



Sarah Green, J.D.
Executive Director



Lisa Van Liew, CPA
Chief Financial Officer

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

Street Address:
301 N.W. 63rd Street, Suite 500
Oklahoma City, Oklahoma 73116

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BOARD OF TRUSTEES

Chairman

Brandon Meyer, J.D.

Vice-Chairman

Kelsey Ardies

Secretary

Lisa Henderson

Members

Vernon Florence
Shanci Garison
Brent Haken
Michael Kellogg, M.Ed.
Christopher A. Rector
Todd Russ
Stephen Streeter, RIA
John Suter
Marla Tharp
Ryan Walters
Charles Walworth
Polly Christian, (nonvoting)

Designees

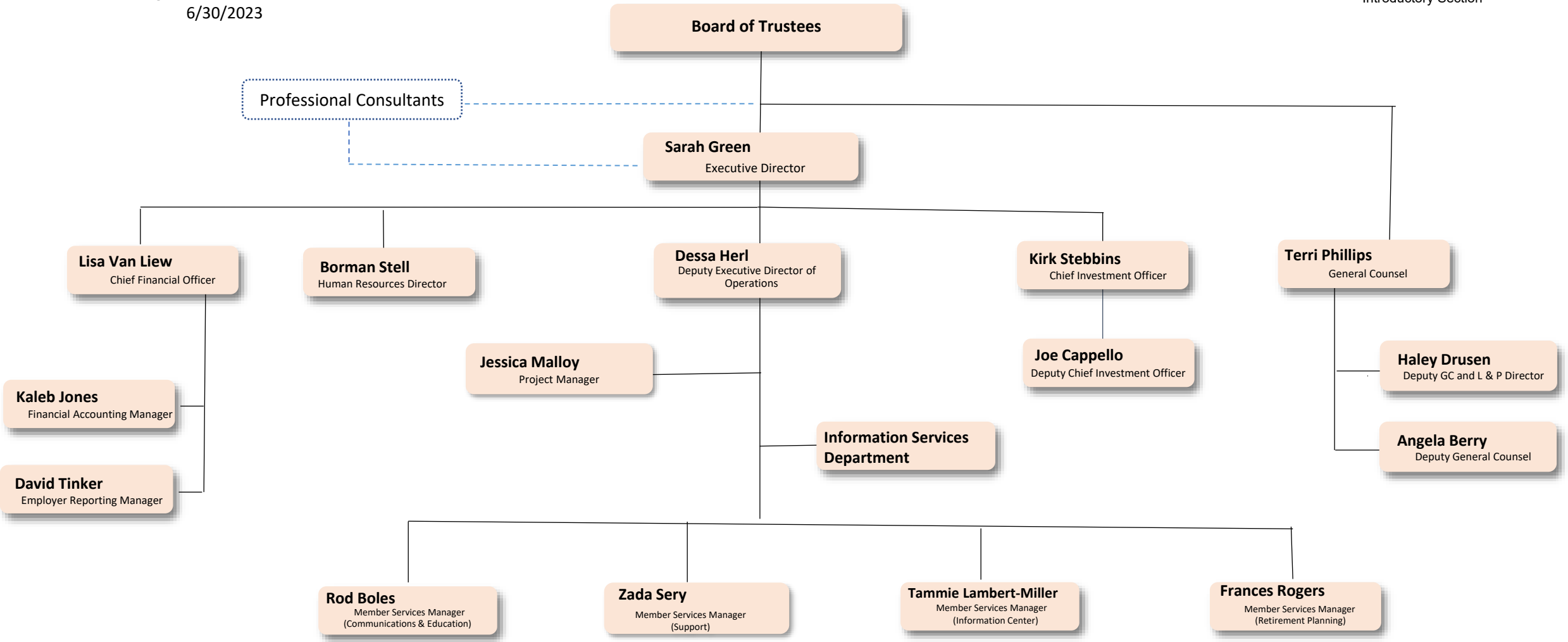
Jordan Harvey, for Treasurer Russ
Brandi Manek, for Director Suter
Mathangi Shankar, CPA, for Superintendent Walters
Greg Winters, Ph.D. for Director Haken

TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA

Organizational Structure

6/30/2023

Introductory Section



**TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA
PROFESSIONAL CONSULTANTS**

OUTSIDE LEGAL COUNSEL

Ice Miller
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Indianapolis, IN 46282

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Oklahoma City, OK 73102

ACTUARY

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Irving, TX 75038-2631

EXTERNAL AUDITOR

Eide Bailly LLP
621 N. Robinson Avenue
Suite 200
Oklahoma City, OK 73102

INTERNAL AUDITORS

CBIZ Stinnett
825 N. Broadway Avenue
Oklahoma City, OK 73102

INVESTMENT CUSTODIAN

Northern Trust Corporation
50 South La Salle Street
Chicago, IL 60603

INVESTMENT CONSULTANTS

Aon Investments USA, Inc.
200 E. Randolph Street
Suite 700
Chicago, IL 60601

ALTERNATIVE INVESTMENT ADMINISTRATION

Meketa Investment Group
80 University Avenue
Westwood, MA 02090

The Schedule of Investment Expenses (page 64) and Schedule of Professional/Consultant Fees (page 66) in the Financial Section, and the Investment Assets and Management Fees by Strategy (pages 83-84) and Schedule of Stock Broker Commissions (page 85) in the Investment Section contain additional information regarding professional advisors and consultants.



Plan Summary 2022-2023

BEGINNINGS

The Teachers' Retirement System of Oklahoma (the System) was established July 1, 1943, to provide retirement allowances and other specified benefits for qualified employees of state-supported educational institutions.

ADMINISTRATION

A 15 member Board of Trustees oversees the administration of the System and acts as fiduciary for investing its funds.

CONTRIBUTIONS

Members of the System contribute 7% of their total compensation (salary and fringe benefits).

Statutes also require employers to contribute a percentage of applicable employee earnings. The employer contribution rate for K-12 school districts, career-techs, and junior colleges is 9.5%. The employer contribution rate for comprehensive universities (University of Oklahoma and Oklahoma State University and their entities) and the state's four-year regional universities is 8.55%.

MEMBERSHIP

Oklahoma statutes require classified personnel to be members of the System. The definition of classified personnel in 70 O.S. § 17-101 includes teachers and other certified employees of common schools, faculty and administrators in public colleges and universities, and administrative personnel of state educational boards and agencies. Membership is optional for all other regular employees of public educational institutions who work at least 20 hours per week.

Employees of a charter school may join the System if the Teachers' Retirement System Board of Trustees approves the school's application for membership.

Eligible employees at the University of Oklahoma, OU Health Sciences Center, and Oklahoma State University have the option to participate in an alternate retirement plan provided by the universities. Employees choosing the alternate retirement plan are not eligible to participate in the System as long as they remain employees of the universities.

SERVICE CREDIT

Service credit of up to 1 year is earned for every year of full-time employment. Fractional service is earned for periods of employment that are less than full time equivalent or for part-time employment. Members may purchase credit for out-of-state service, adjunct service, substitute teaching service, sabbatical leave, military service, service with certain Oklahoma governmental entities, incentive credit, and certain employment in Oklahoma schools before the date of membership.

Retiring members may count up to 120 days of unused accumulated sick leave toward an additional year of service credit. Unused sick leave of less than 120 days is granted a fractional year of service credit.

RETIREMENT ANNUITY

Members who joined the System prior to November 1, 2017, are fully vested after five years of contributory Oklahoma membership service. Those who joined on or after November 1, 2017, are fully vested after seven years of contributory Oklahoma membership service and may choose to take an early, reduced retirement benefit, or stay to qualify for a regular, unreduced retirement

benefit. A vested member is eligible to receive a retirement benefit when one of the following requirements is met:

Age 62 or Combination 80. Those who joined the System prior to July 1, 1992, may retire with an unreduced benefit at age 62 or when the member's age and years of creditable service total 80 points. The highest three salaries are used in the calculation of the benefit. A reduced annuity is available at the minimum age of 55.

Age 62 or Combination 90. Those who joined the System on or after July 1, 1992, and before November 1, 2011, may retire with unreduced benefits at age 62 or when the member's age and years of creditable service total 90 points. Those who qualify under Combination 90 use the highest consecutive five contributory salaries to calculate their benefit in the retirement formula. A reduced annuity is available at the minimum age of 55.

Age 65 or Combination 90 at Age 60. Those who joined the System on or after November 1, 2011, may retire with an unreduced benefit at age 65 or when the member's age is at least 60 and years of creditable service total at least 90 points. Those who qualify under this rule use the highest consecutive five contributory salaries to calculate their benefit in the retirement formula. A reduced annuity is available at the minimum age of 60.

The Teachers' Retirement System of Oklahoma is a governmental defined benefit plan under Section 401(a) of the Internal Revenue Code. The retirement benefits paid to our members are not determined by the fair value of their retirement account, but rather by a formula. The formula includes years of service and final average salary (FAS) multiplied by a 2% computation factor.

For members who joined prior to July 1, 1992, the FAS is calculated by averaging the member's highest three salaries earned during contributory employment. For members joining after July 1, 1992, the FAS is calculated by averaging the member's highest five consecutive salaries earned during contributory employment.

The Education Employees Service Incentive Plan (EESIP) provides the opportunity for capped years to be diminished by two years for every one year worked in common education or career technology district beyond the full retirement eligibility date. If salaries earned prior to July 1, 1995, are greater than \$40,000, there will be a cost to participate in EESIP. Members retiring from a four year university, college or other related entity are not eligible to participate in this plan.

If a member works for a comprehensive university (OU/OSU) or other associated entity, the retirement benefit calculation may involve a multi-step process. First, the capped average salary prior to July 1, 1995, is determined. Next the capped average salary between July 1, 1995, and June 30, 2007, is determined. Finally, years of service that did not meet the caps as well as service credit earned after July 1, 2007, will be incorporated into the retirement benefit formula using the highest average of actual total compensation, not to exceed the IRS compensation limits. There may be as few as one average salary or as many as four weighted averages to determine the final average salary used in the final benefit calculation.

Each of the Systems' five retirement options provides a lifetime benefit to the member. After the member's death, the designated beneficiary(ies) receive either a lump-sum payment or continued payments to one joint annuitant, depending upon the elected option's provisions.

DISABILITY BENEFITS

Members may qualify for disability retirement benefits if a medical condition keeps them from performing their regular job duties. A member may be considered for a disability retirement benefit if he or she is active and has at least 10 years of contributory service, a disability retirement application detailing the medical condition (which must have existed while employed by the public schools of Oklahoma) is received, and an application is approved by the System's Medical Review Board.

If a member is awarded Social Security Disability benefits, the member may receive disability benefits with the System if the disability is incurred while employed by the public schools and the System is provided with proof of the Social Security award.

HEALTH INSURANCE BENEFIT

If members have at least 10 years of creditable service and retire or terminate employment, they may elect to continue coverage in the insurance program the employer provides to active employees.

If members are not enrolled in the state plan, coverage is subject to the provisions of the plan in which they are enrolled.

Dependent and dental coverage is available if the member is enrolled in the State and Education Employees Group Health and Dental Insurance Plan.

Once a member begins receiving a monthly annuity, Teachers' Retirement System of Oklahoma will pay the first \$100 to \$105 of monthly premiums for the member but not for dependents. The amount paid by the System is determined by the member's total service and average salary at retirement.

If members have fewer than 10 years of employment, they have certain rights under federal law to continue health insurance coverage after employment ends. Specific information about continued coverage may be requested from the employer or the Employees Group Insurance Division of the Office of Management and Enterprise Services before termination.

SURVIVOR BENEFITS

Members' designated beneficiaries or estates are entitled to survivor benefits if the members are active in-service or retired at the time of their death.

If a member is an active in-service member at the time of death, the beneficiary(ies) will receive an \$18,000 death benefit, plus the contributions in the member's account and interest on those contributions. "Active in-service" is defined in the System's rules, but generally means a member currently employed by an Oklahoma public education institution. If a member dies, and the member is an active in-service member who qualified for service retirement and has one designated primary beneficiary, he or she may choose a monthly benefit instead of the lump-sum payment.

When an inactive member dies, the beneficiaries receive the amount of the contributions in the member's account, plus interest on those contributions, but will not qualify for the \$18,000 death benefit or the monthly retirement benefit payment payable to the surviving beneficiary of active in-service members.

If a retiree dies, the beneficiaries or estate will receive a \$5,000 death benefit, plus the survivor benefits provided by retiree's chosen retirement plan option. Certain plan options provide surviving joint annuitants with a continuing monthly retirement benefit.

WITHDRAWING CONTRIBUTIONS

If a member leaves a job that was qualified for membership, the member may request a refund of his or her contributions any time after the last day on that job. The member will be eligible to receive the refund four months after termination. The refund includes all member contributions, even if these contributions were made on the member's behalf by the employer, plus any applicable portion of interest earnings. When a member accepts a refund, all service credit is forfeited.

If a member returns to qualifying employment, the amount of the withdrawal may be redeposited after contributing to the System for 12 months. Redepositing withdrawn contributions reinstates the initial membership date. If withdrawn contributions

are not redeposited, the official membership date will be the date the member rejoined the System.

If the member redeposits, the entire amount withdrawn must be repaid to the System. In addition, 10% simple interest must be redeposited on the withdrawn amount for each year the account was withdrawn. This amount may be paid in one lump sum or through installment payments for up to 60 months.

A member may also leave the contributions in his or her account. If a member is vested (with at least five or seven years of Oklahoma service), the account will continue earning interest until the member withdraws it or begins drawing a retirement benefit. If a member is not vested, the account will continue earning interest for five years, unless withdrawn before then.

RIGHTS AND RESPONSIBILITIES

Teachers' Retirement System of Oklahoma publications provide answers to general questions. A member is responsible for resolving any questions about his or her retirement account. Members are entitled to counseling from the staff concerning any questions they have about their retirement account. The System will not be held accountable for information that is contrary to statutes or administrative rules, regardless of who provides that information.

For details of how statutes and administrative rules may affect a retirement account, contact

Teachers' Retirement System of Oklahoma
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Oklahoma City, OK 73152-3524

Street Address
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Oklahoma City, OK 73116-7921

Phone Numbers
(405) 521-2387 (OKC Area)
(877) 738-6365 (Toll Free)

Website:
www.Oklahoma.gov/TRS

This Plan Summary provides general information summarizing the basic benefits available to members of the System. If conflict arises between information contained in this summary and state statutes or official Teachers' Retirement System of Oklahoma rules, the law and/or rule takes precedence.

Revised 11/17/2023



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

Teachers' Retirement System of Oklahoma

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2022

Christopher P. Morrill

Executive Director/CEO



Financial Section

TRS manages a \$20.85 billion pension fund for Oklahoma's public education employees.





Independent Auditor's Report

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

Report on the Audit of the Financial Statements

Opinions

We have audited the financial statements of the pension and medical supplement defined benefit plan (OPEB Plan) of the Teachers' Retirement System of Oklahoma (the System), a component unit of the state of Oklahoma, as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the System, as of June 30, 2023, and the respective changes in financial position in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Emphasis of Matter

Alternative Investments

As discussed in Notes 2 and 3 to the financial statements, total system investments include alternative investments valued at \$3,274,857,128 (14.7% of total assets), as of June 30, 2023, whose fair value have been estimated by management in the absence of readily determinable values. Management's estimates are based on information provided by the fund managers or the general partners. Our opinion is not modified with respect to this matter.

What inspires you, inspires us. | eidebailly.com

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

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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 System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the required supplementary information, as referenced within the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, 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 GAAS, 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 Supplementary 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 other supplementary information, as referenced in the table of contents, 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 GAAS. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory, investment, actuarial and statistical sections, but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Report on Summarized Comparative Information

We have previously audited the System's June 30, 2022, financial statements, and we expressed an unmodified opinion on the statement of fiduciary net position and the statement of changes in fiduciary net position in our report dated October 12, 2022. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2022, is consistent, in all material respects with the audited financial statements from which it has been derived.

The image shows a handwritten signature in cursive script that reads "Eide Bailly LLP".

Oklahoma City, Oklahoma
October 20, 2023

**Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022**

Management is pleased to present this discussion and analysis of the financial activities of the Teachers' Retirement System of Oklahoma ("TRS" or the "System") for the years ended June 30, 2023 and 2022. The System is responsible for administering retirement benefits for the following plans: an Internal Revenue Code (IRC) section 401(a) defined benefit plan ("DB Plan") and an IRC Section 401(h) medical supplement defined benefit plan, ("OPEB Plan"), (collectively "the Plans"). The 401(a) Plan is available for public education employees of the state of Oklahoma. The 401(h) Plan is available for all eligible members.

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 members.

This discussion and analysis is intended to serve as an introduction to the System's basic financial statements. TRS's basic financial statements are comprised of three components: 1) *the statement of fiduciary net position*, 2) *the statement of changes in fiduciary net position*, and 3) *the notes to the financial statements*. This report also contains *required supplementary information* and *other 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 and liabilities, with the difference between these reported as *net position restricted for pensions and OPEB*. 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 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 (RSI)* presents various required schedules for pensions and OPEB. *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
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022

Condensed Financial Information

The following are condensed schedules of financial information about the Plans in the System for the years ended June 30, 2023, 2022, and 2021, and the results of the years then ended.

Fiduciary net position as of June 30:

	OPEB Plan	DB Plan	System Total			2023	2022
			2023	2022	2021	% Change	% Change
Assets							
Cash	\$ -	\$ 25,777,679	\$ 25,777,679	\$ 33,320,929	\$ 25,803,234	-22.6%	29.1%
Receivables	15,423,496	733,575,576	748,999,072	544,790,611	211,491,831	37.5%	157.6%
Long- and short-term investments, at fair value	472,975,118	20,407,389,526	20,880,364,644	19,686,474,977	22,025,570,560	6.1%	-10.6%
Securities lending institutional daily assets fund	14,862,334	627,403,461	642,265,795	1,421,896,735	1,349,706,322	-54.8%	5.4%
Total investments and other assets	503,260,948	21,794,146,242	22,297,407,190	21,686,483,252	23,612,571,947	2.8%	-8.2%
Capital assets, net	78,376	3,308,575	3,386,951	3,525,536	3,943,725	-3.9%	-10.6%
Total assets	503,339,324	21,797,454,817	22,300,794,141	21,690,008,788	23,616,515,672	2.8%	-8.2%
Liabilities							
Investment settlements and other liabilities	18,625,610	786,267,640	804,893,250	598,704,151	214,740,249	34.4%	178.8%
Payable under securities lending agreement	14,862,334	627,403,461	642,265,795	1,421,896,735	1,349,706,322	-54.8%	5.4%
Total liabilities	33,487,944	1,413,671,101	1,447,159,045	2,020,600,886	1,564,446,571	-28.4%	29.2%
Net Position							
Net position restricted for pensions and OPEB	\$ 469,851,380	\$ 20,383,783,716	\$ 20,853,635,096	\$ 19,669,407,902	\$ 22,052,069,101	6.0%	-10.8%

Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022

Condensed Financial Information (Continued)

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

	OPEB Plan	DB Plan	System Total			2023	2022
			2023	2022	2021	% Change	% Change
Additions:							
Member contributions	\$ -	\$ 371,519,419	\$ 371,519,419	\$ 366,066,840	\$ 343,474,401	1.5%	6.6%
Employer contributions	2,731,578	510,241,100	512,972,678	495,861,085	464,336,615	3.5%	6.8%
Matching contributions	-	47,085,349	47,085,349	47,040,754	34,371,572	0.1%	36.9%
Dedicated tax revenue	-	466,646,840	466,646,840	424,507,378	276,918,852	9.9%	53.3%
Net investment income gain (loss)	34,045,252	1,437,197,429	1,471,242,681	(2,082,110,613)	5,556,807,673	170.7%	-137.5%
Security lending net income	138,759	5,857,617	5,996,376	4,448,445	4,590,080	34.8%	-3.1%
Total additions	36,915,589	2,838,547,754	2,875,463,343	(744,186,111)	6,680,499,193	486.4%	-111.1%
Deductions:							
Benefit payments	34,921,903	1,598,943,437	1,633,865,340	1,594,238,124	1,520,628,861	2.5%	4.8%
Refund of member contributions and other payments	-	50,552,204	50,552,204	38,398,988	31,939,815	31.6%	20.2%
Administrative expenses	13,321	6,805,284	6,818,605	5,837,976	5,475,953	16.8%	6.6%
Total deductions	34,935,224	1,656,300,925	1,691,236,149	1,638,475,088	1,558,044,629	3.2%	5.2%
Net increase (decrease) in net position	1,980,365	1,182,246,829	1,184,227,194	(2,382,661,199)	5,122,454,564	149.7%	-146.5%
Net Position Restricted for Pensions and OPEB							
Beginning of year	467,871,015	19,201,536,887	19,669,407,902	22,052,069,101	16,929,614,537	-10.8%	30.3%
End of year	\$ 469,851,380	\$ 20,383,783,716	\$ 20,853,635,096	\$ 19,669,407,902	\$ 22,052,069,101	6.0%	-10.8%

Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022

Financial Highlights and Analysis

The pension system's net position increased 6.2 percent and the OPEB net position increased 0.4 percent. The increase was due to an increase in dedicated revenue and strong investment returns from a strong global equity market, declining inflation, supply chain improvements, and the end of rising interest rates by the Federal Reserve in sight. The domestic equity portfolio achieved a net return of 15.4%. The international equity portfolio earned a net return of 11.2%. The fixed income portfolio earned a net return of 0.9%. The System's core and non-core real estate portfolios earned net returns of -3.8% and -5.0% respectively as real estate values were hurt by rising interest rates. The System's private capital portfolio, which includes private equity and private debt, earned a net return of -3.1%. In total, the System's portfolio earned a net return of 8.0%, underperforming the portfolio's policy benchmark return of 12.1%. The underperformance was largely due to a timing mismatch in the private equity benchmark and the portfolio's overweight to smaller capitalization equities. The System's actuarial assumed return is 7%.

	OPEB Plan	DB Plan	System Totals		
			2023	2022	2021
Plan net position	\$ 469,851,380	\$ 20,383,783,716	\$ 20,853,635,096	\$ 19,669,407,902	\$ 22,052,069,101
Yearly % change	0.4%	6.2%	6.0%	-10.8%	30.3%

The total investment return for longer periods of time continues to be near the actuarial assumed rate of return. The 10-year rate of return remains strong at 7.8%.

Total Returns				
Net of Fees	1 Year	3 Year	5 Year	10 Year
2023	8.0%	9.1%	6.6%	7.8%
2022	-9.6%	6.6%	6.9%	8.7%
2021	33.0%	12.1%	12.2%	10.0%

Benefit payments increased 2.5 percent in FY 2023 compared to FY 2022. The increase is a result of a 1.6 percent increase in the number of benefit recipients and a 1.5 percent increase in the average monthly benefit. Benefit payments to retired members in FY 2023 exceeded contributions from members and employers by \$286 million, or a ratio of 1.20 to 1. A ratio of more than one signifies that the System is receiving fewer contributions than it pays out in benefits. In a mature pension system like TRS a significant percentage of the benefits is paid out of investment earnings that are not reflected in this ratio. The table below reflects the ongoing employer and member contributions.

Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022

	OPEB Plan	DB Plan	System Totals		
			2023	2022	2021
Member contributions	\$ -	\$ 371,519,419	\$ 371,519,419	\$ 366,066,840	\$ 343,474,401
Employer contributions	2,731,578	510,241,100	512,972,678	495,861,085	464,336,615
State matching funds	-	47,085,349	47,085,349	47,040,754	34,371,572
Dedicated tax revenue	-	466,646,840	466,646,840	424,507,378	276,918,852
Total contributions	<u>\$ 2,731,578</u>	<u>\$ 1,395,492,708</u>	<u>\$ 1,398,224,286</u>	<u>\$ 1,333,476,057</u>	<u>\$ 1,119,101,440</u>
Benefit payments	\$ 34,921,903	\$ 1,598,943,437	\$ 1,633,865,340	\$ 1,594,238,124	\$ 1,520,628,861
Refund of contributions	-	50,552,204	50,552,204	38,398,988	31,939,815
Total payments	<u>\$ 34,921,903</u>	<u>\$ 1,649,495,641</u>	<u>\$ 1,684,417,544</u>	<u>\$ 1,632,637,112</u>	<u>\$ 1,552,568,676</u>
Ratio of benefit payments to contributions		1.18:1	1.20:1	1.22:1	1.39:1

Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022

Financial Highlights and Analysis (Continued)

The number of pension benefit recipients increased 1.6 percent in FY 2023 as compared to 2.0 percent in FY 2022 and 1.9 percent in FY 2021. There was a net increase of 1,102, 1,314, and 1,238 members that retired for FY 2023, FY 2022 and FY 2021, respectively. The number of OPEB benefit recipients increased 1.1 percent in FY 2023 as compared to 1.4 percent for FY 2022 and 1.5 percent for FY 2021. There was an increase of 654, 849 and 867 members that retired and opted to receive the OPEB benefit in FY 2023, FY 2022 and FY 2021, respectively.

	OPEB Plan 2023	DB Plan 2023	OPEB Plan 2022	DB Plan 2022	OPEB Plan 2021	DB Plan 2021
Benefit recipients	61,447	69,432	60,793	68,330	59,944	67,016
Yearly % change	1.1%	1.6%	1.4%	2.0%	1.5%	1.9%
Net increase	654	1,102	849	1,314	867	1,238

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 1.6 percent, the table below reflects the average benefit per retiree has increased by 1.5 percent in FY 2023 as compared to 2.1 percent and 4.6 percent in FY 2022 and FY 2021 respectively. The increase in benefit recipients was 0.1 percent higher in FY 2023 as compared to 0.1 percent lower in FY 2022 and, 2.7 percent lower in FY 2021 than the increase in average benefit payment below.

	2023		2022		2021	
Average monthly benefit	\$	1,897	\$	1,869	\$	1,830
Yearly % change		1.5%		2.1%		4.6%

The following table shows the ratio of active members to retired members of the System is 1.45 to 1 in FY 2023, compared to 1.46 to 1 in FY 2022, and 1.34 to 1 in FY 2021. The ratio for FY 2023 decreased compared to FY 2022 due to retiring teachers exceeding new hires. Contributing members increased by 1,115 in FY 2023, increased by 9,899 in FY 2022 and decreased by 1,526 in FY 2021, while benefit recipients increased by 1,102 in FY 2023, 1,314 in FY 2022 and 1,238 in FY 2021.

	DB Plan 2023	DB Plan 2022	DB Plan 2021
Members contributing	100,959	99,844	89,945
Yearly % change	1.1%	11.0%	(-1.7)%
Benefit recipients	69,432	68,330	67,016
Yearly % change	1.6%	2.0%	1.9%
Ratio contributing/retired	1.45	1.46	1.34

In the table below the ratio of the DB plan fiduciary net position to the total DB plan liability increased by 2.5 percent in FY 2023 and decreased by 10.8 percent in FY 2022. The OPEB plan fiduciary net position to the total OPEB plan liability increased by 1.7 percent in FY 2023 and decreased by 19.6 percent in FY 2022. The funded ratios of the DB plan and the OPEB plan are 72.6 percent and 112.0 percent respectively for FY 2023.

**Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022**

Financial Highlights and Analysis (Continued)

	OPEB Plan 2023	DB Plan 2023	OPEB Plan 2022	DB Plan 2022	OPEB Plan 2021	DB Plan 2021
Total pension liability	\$ -	\$ 28,090,258,604	\$ -	\$ 27,410,915,544	\$ -	\$ 26,607,617,421
Total OPEB liability	419,483,308	-	424,129,431	-	425,907,944	-
Fiduciary net position -Pensions or similar	469,851,380	20,383,783,716	467,871,015	19,201,536,887	553,278,716	21,498,790,385
Employers' net pension liability	-	7,706,474,888	-	8,209,378,657	-	5,108,827,036
Employers' net OPEB asset	(50,368,072)	-	(43,741,584)	-	(127,370,772)	-
Ratio of Employers' fiduciary net position to applicable liabilities	112.01%	72.57%	110.31%	70.05%	129.91%	80.80%

Under GASB Statement 67, *Financial Reporting for Pension Plans*, the DB plan ratio above represents the Total Pension Liability compared to the Plan's total net position at fair value. Prior to GASB Statement 67 this ratio was calculated using the actuarial value of the Plan's net position.

Under GASB Statement 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, the ratio above represents the Total OPEB Liability compared to the Plan's total net position at fair value.

Based on the actuarial value of assets or the fair value of assets at the end of FY 2023, and the projected continuation of contribution rates and other revenue, and all assumptions hold constant, the Plan's actuary projected a "funding period" of 12 years.

Effective August 2, 2018, the Oklahoma State Legislature amended Oklahoma Statutes Title 70, Section 17-102.3 to authorize TRS to terminate the TRS 403(b) Program. The Board of Trustees voted to terminate the TRS 403(b) Program effective January 29, 2021. All affected school districts were advised of the termination of the Program as well as each district's responsibilities with respect to the accounts currently under the TRS 403(b) Program.

House Bill 2894 passed in the 2021 session. This bill eliminated the second year of the redirection of typical TRS apportionments provided in HB 2741 (2020) on income (individual and corporate), sales, and use taxes. Effective July 1, 2021, this bill restored apportionment fractions to TRS to the typical 5.00% for FY 2022, while providing an enhanced rate of 5.25% for FY 2023 – FY 2027 to make up for the reduced rate in FY 2021.

House Bill 2293 passed in the 2022 session. This bill creates two separate rates for TRS's matching contribution: one for summer programs, and one for any other employment. While both rates will be actuarially determined, the summer school rate will be limited to one half of the regular matching rate. This bill would have the effect of reducing revenue to TRS for the specified summer programs. However, after conferring with the System's actuary, the reduced rate will cover the increased cost to the System for this summer work, as most members do not gain any additional service credit while working in these programs. Therefore, TRS does not expect this legislative change to have an actuarial impact on the System.

Senate Bill 0683 passed in the 2022 session. This bill removes the requirement that non-classified optional personnel be regularly employed for more than one year to participate in TRS. Instead, these employees, working 20 or more hours per week, may join the System upon hiring. It also establishes an election system in which optional employees must make a one-time, irrevocable election to opt-in or -out of the plan upon their initial eligibility to the plan.

Management's Discussion and Analysis
Teachers' Retirement System of Oklahoma
June 30, 2023 and 2022

Financial Highlights and Analysis (Continued)

Senate Bill 0267 passed in the 2022 session. This bill opens a three-year window to allow certain retirees to return to employment as an active classroom teacher without salary limitations while receiving retirement benefits. This bill encourages qualified retired educators to return to the classroom. As post-retirement contributions will be owed on all salary paid to these retirees, TRS does not anticipate that this bill will negatively affect the System.

House Bill 4388 passed in the 2022 session. This bill requires the portion of lottery annual net proceeds deposited to the Oklahoma Education Lottery Trust Fund that exceeds \$65 million to be deposited into a Teacher Empowerment Fund. Prior to the passage of this bill, TRS received a portion of all funds that were placed in the Lottery Trust Fund. TRS will now only receive a portion of funds on the first \$65 million placed in that account annually.

House Bill 2034 passed in the 2022 session. This bill requires the treasurer to prepare and maintain, and provide to each state governmental entity, a list of all financial companies that boycott energy companies. It requires divestment of financial companies specified therein. This bill exempts a state pension system from the divestment requirements of the act if it determines that such requirements would be inconsistent with its fiduciary responsibility with respect to the investment of entity assets or other duties imposed by law relating to the investment of entity assets. This bill also prohibits the State and its political subdivisions from entering a contract with a company unless the company submits a written certification that the company is not currently engaged in a boycott of the oil and gas industry subject to certain rules.

Senate Bill 1119 passed in the 2022 session. Under SB 1119, adjunct teachers (as described in 70 O.S. § 6-122.3) will be considered non-classified optional personnel starting July 1, 2022. As non-classified optional personnel, these individuals would be considered eligible to participate in TRS as optional members if they are "regularly employed for twenty (20) hours or more per week." 70 O.S. 17-103. As optional personnel, they will be subject to requirements regarding electing to participate in TRS.

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

Statement of Fiduciary Net Position
June 30, 2023 (With Comparative Totals as of June 30, 2022)

	OPEB Plan	DB Plan	Totals June 30,	
			2023	2022
Assets				
Cash	\$ -	\$ 25,777,679	\$ 25,777,679	\$ 33,320,929
Short-term investments	15,418,041	650,862,220	666,280,261	508,242,866
Accrued interest and dividends receivable	2,108,263	88,998,910	91,107,173	79,550,307
Member contributions receivable	-	27,280,969	27,280,969	30,649,775
Employer contributions receivable	1,033,080	43,610,760	44,643,840	51,493,866
Receivable from the State of Oklahoma	-	55,202,117	55,202,117	59,059,138
Due from brokers for securities sold	12,282,153	518,482,820	530,764,973	324,037,525
Security lending institutional daily assets fund	14,862,334	627,403,461	642,265,795	1,421,896,735
Long-term investments:				
U.S. government securities	41,546,877	1,793,922,658	1,835,469,535	1,770,679,012
U.S. corporate bonds	54,901,611	2,370,557,109	2,425,458,720	2,371,902,106
International corporate bonds and government securities	13,887,408	599,634,388	613,521,796	621,790,185
Equity securities	273,092,963	11,791,684,241	12,064,777,204	10,788,669,726
Private equity	39,847,063	1,720,527,636	1,760,374,699	1,997,702,497
Real estate	34,281,155	1,480,201,274	1,514,482,429	1,627,488,585
Total long-term investments	457,557,077	19,756,527,306	20,214,084,383	19,178,232,111
Capital assets, net	78,376	3,308,575	3,386,951	3,525,536
Total assets	\$ 503,339,324	\$ 21,797,454,817	\$ 22,300,794,141	\$ 21,690,008,788
Liabilities				
Benefits in process of payment	\$ 638	\$ 26,961	\$ 27,599	\$ 108,987,240
Due to brokers for securities purchased	18,517,384	781,698,919	800,216,303	480,703,393
Payable under security lending agreement	14,862,334	627,403,461	642,265,795	1,421,896,735
Other liabilities	107,588	4,541,760	4,649,348	9,013,518
Total liabilities	\$ 33,487,944	\$ 1,413,671,101	\$ 1,447,159,045	\$ 2,020,600,886
Net Position				
Net position restricted for pensions and OPEB	\$ 469,851,380	\$ 20,383,783,716	\$ 20,853,635,096	\$ 19,669,407,902

See Notes to Financial Statements.

Teachers' Retirement System of Oklahoma

Statement of Changes in Fiduciary Net Position

For the year ended June 30, 2023 (With Comparative Totals for the Year Ended June 30, 2022)

	OPEB Plan	DB Plan	Totals	
			Year Ended June 30,	
			2023	2022
Additions:				
Members	\$ -	\$ 371,519,419	\$ 371,519,419	\$ 366,066,840
Employer statutory requirement from local school districts	2,731,578	510,241,100	512,972,678	495,861,085
Matching funds	-	47,085,349	47,085,349	47,040,754
Dedicated tax	-	466,646,840	466,646,840	424,507,378
Total contributions	2,731,578	1,395,492,708	1,398,224,286	1,333,476,057
Investment income:				
Interest and dividends	11,754,857	496,223,390	507,978,247	438,991,031
Net appreciation (depreciation) in fair value of investments	23,366,006	986,380,221	1,009,746,227	(2,458,903,460)
Investment expenses	(1,075,611)	(45,406,182)	(46,481,793)	(62,198,184)
Gain (loss) from investing activities	34,045,252	1,437,197,429	1,471,242,681	(2,082,110,613)
Income from securities lending activities:				
Securities lending income	154,177	6,508,463	6,662,640	4,942,717
Securities lending expenses:				
Management fees	(15,418)	(650,846)	(666,264)	(494,272)
Net income from securities lending activities	138,759	5,857,617	5,996,376	4,448,445
Net investment gain (loss)	34,184,011	1,443,055,046	1,477,239,057	(2,077,662,168)
Total additions	36,915,589	2,838,547,754	2,875,463,343	(744,186,111)
Deductions:				
Retirement, death, survivor and health benefits	34,921,903	1,598,943,437	1,633,865,340	1,594,238,124
Refund of member contributions and other payments	-	50,552,204	50,552,204	38,398,988
Administrative expenses	13,321	6,805,284	6,818,605	5,837,976
Total deductions	34,935,224	1,656,300,925	1,691,236,149	1,638,475,088
Net increase (decrease) in net position	1,980,365	1,182,246,829	1,184,227,194	(2,382,661,199)
Net position restricted for:				
Beginning of year	467,871,015	19,201,536,887	19,669,407,902	22,052,069,101
End of year	\$ 469,851,380	\$ 20,383,783,716	\$ 20,853,635,096	\$ 19,669,407,902

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" or "TRS") 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") and a cost-sharing multiple-employer benefit plan other than pensions ("OPEB Plan").

The supervisory authority for the management and operation of the System is a 15-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 by the Governor, two appointees by the Senate Pro Tempore, two appointees by the House Speaker, four Ex Officio positions, and one non-voting member representing a qualifying organization representing retired educators. Out of the six appointees by the Governor, one must be a Higher Education representative, one is a non-classified 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 Teachers' Retirement System of Oklahoma. The Ex Officio trustees are the State School Superintendent, the Office of Management and Enterprise Services Director, the Career-Tech Director, and the State Treasurer, or their designees.

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 599 contributing employers in the System. The DB Plan's membership consisted of the following as of June 30, 2023:

Pension

Inactive Plan Members or Beneficiaries Currently Receiving Benefits*	69,432
Inactive Plan Members Entitled to But Not Yet Receiving Benefits**	29,993
Active Plan Members	100,959
	<u>200,384</u>

* Service retirements, disability retirements, and beneficiaries.

** Includes 14,956 nonvested terminated members entitled to a refund of their member contributions.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 1. Description of the System (Continued)

OPEB Plan: TRS will pay a monthly health insurance premium supplement for each retired member who is enrolled in the health insurance plan provided by the State and Education Employees Group Health and Dental Insurance plan or in an insurance program provided by a participating education employer who provides health insurance coverage to former employees, provided the retired member had at least ten (10) years of Oklahoma service prior to retirement. The supplement paid by TRS shall be the premium rate of the Medicare supplement charged to the retired employees not to exceed an amount between \$100 and \$105, depending on length of service and the final average salary of the retired member.

OPEB Plan: The OPEB Plan's membership consisted of the following as June 30, 2023:

OPEB

Inactive Plan Members or Beneficiaries Currently Eligible to Receive Benefits*	61,447
Inactive Plan Members Entitled to But Not Yet Receiving Benefits	6,025
Active Plan Members	<u>100,959</u>
Total Plan Members	<u><u>168,431</u></u>

* Service retirements, disability retirements, and beneficiaries

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.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 2. Summary of Significant Accounting Policies (Continued)

System investments are reported at fair value within the hierarchy established by generally accepted accounting principles, most recently by Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application*. 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 System also invests as a limited partner in alternative investments. These investments employ specific strategies such as leveraged 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.

The System's real estate investments are primarily through limited partnerships. Properties owned by the partnership are subject to independent third-party appraisals performed every three years in accordance with the Uniform Standards of Professional Appraisal Practice. 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. The System evaluates investments in conjunction with their custodial bank and investment managers for impairment whenever events or changes in circumstances indicate that the carrying or fair value of the asset may not be recoverable. Should investments be deemed permanently impaired, the carrying or fair value is adjusted to the impaired value with an adjustment to investment income.

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.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 2. Summary of Significant Accounting Policies (Continued)

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 counterparties. The System could incur a loss if its counterparties 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, 2023.

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, 2023, the asset allocation guidelines established by the Board's investment policy were:

Asset Class	Target Asset Allocation
Domestic Equity	38.3%
International Equity	16.7%
Domestic Fixed Income	22.0%
Real Estate	10.0%
Private Equity	8.0%
Private Debt	5.0%
Total	100.0%

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 9 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).

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 \$317,000 at June 30, 2023.

Plan Termination: In the event the System terminates, the Board of Trustees will distribute the net position 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. Management of the System has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities to prepare these financial statements in conformity with U.S. generally accepted accounting principles (GAAP), note disclosure and required supplementary information (RSI). Actual results could differ from these estimates.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments

At June 30, 2023, the carrying amount of the System's bank accounts was approximately \$25,778,000. The bank balance of the System's accounts at June 30, 2023, was approximately \$(72,303,000).

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.

Fair Value Measurements: The System categorizes fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements) as follows:

- Level 1 Unadjusted quoted prices for identical instruments in active markets.
- Level 2 Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.
- Level 3 Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments that are measured using the net asset value per share (NAV) (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. In instances where inputs used to measure fair value fall into different levels in the fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

The System's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset or liability. The following table shows the fair value levels of the investments for the System as of June 30, 2023:

Investments by fair value level		Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3
Fixed Income securities				
Asset Backed Securities	\$ 277,072,672	\$ -	\$ 167,252,274	\$ 109,820,398
Bank Loans	28,664,486	-	28,664,486	-
Commercial Mortgage-Backed	164,908,731	-	110,356,026	54,552,705
Corporate Bonds	2,368,162,205	-	2,365,057,528	3,104,677
Corporate Convertible Bonds	98,003,227	-	98,003,227	-
Government Agencies	26,982,984	-	26,982,984	-
Government Bonds	1,084,728,915	-	1,084,728,915	-
Government Mortgage Backed Securities	756,731,720	-	679,661,084	77,070,636
Gov't-issued Commercial Mortgage-Backed	4,980,418	-	4,194,248	786,170
Index Linked Government Bonds	6,432,876	-	6,432,876	-
Municipal/Provincial Bonds	5,086,710	-	5,086,710	-
Non-Government Backed C.M.O.s	52,695,107	-	47,003,757	5,691,350
Total fixed income securities	4,874,450,051	-	4,623,424,115	251,025,936
Equity securities				
Common Stock	11,925,825,552	11,922,406,078	314,812	3,104,662
Convertible Equity	10,314,422	10,314,422	-	-
Funds - Equities ETF	102,406,842	102,406,842	-	-
Preferred Stock	20,423,611	17,899,613	-	2,523,998
Other Securities	5,806,777	5,797,236	-	9,541
Total equity securities	12,064,777,204	12,058,824,191	314,812	5,638,201
Total investments by fair value level	\$ 16,939,227,255	\$ 12,058,824,191	\$ 4,623,738,927	\$ 256,664,137
Investments measured at the net asset value (NAV)				
Private Equity Investments	\$ 1,760,374,699			
Real Estate Investments	1,514,482,429			
Total Investments measured at the NAV	3,274,857,128			
Total Investments measured at fair value and NAV	\$ 20,214,084,383			

Equity, derivative securities, and governmental debt securities classified in Level 1 are valued using prices quoted in active markets for those securities. Debt and debt derivative securities classified in Level 2 and Level 3 are valued using either a bid evaluation or a matrix pricing technique. Bid evaluations may include market quotations, yields, maturities, call features and ratings.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

Matrix pricing is used to value securities based on the securities relationship to benchmark quoted prices. Index linked debt securities are valued by multiplying the external market price feed by the applicable day's Index Ratio.

Level 2 debt securities have non-proprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities.

Level 3 debt securities use proprietary information or single source pricing. Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

Investments in Entities that Calculate Net Asset Value per Share

The System holds shares or interests in investment companies at where the fair value of the investments are measured on a recurring basis using net asset value per share (or its equivalent) of the investment companies as a practical expedient.

The System's policy is to obtain an external appraisal a minimum of every year for properties or portfolios over which the System has some degree of control or discretion. In practice, some investments are appraised annually. Appraisals are performed by an independent appraiser with preference for Member Appraisal Institute (MAI) designated appraisers. The appraisals are performed using generally accepted valuation approaches applicable to the property type.

At year end, the NAV value, unfunded commitments, and redemption rules of those investments is as follows:

	Net Asset Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Private Equity Investments	\$ 1,760,374,699	\$ 1,346,333,864	N/A	N/A
Real Estate Investments	1,514,482,429	593,803,454	N/A	N/A
Private Debt Instruments	-	1,000,000,000	N/A	N/A
Total investments measured at the NAV	<u>\$ 3,274,857,128</u>			

Real Estate Investments: This type includes 25 real estate funds that invest primarily in commercial real estate. The values of the investments in this type have been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital. These investments can never be redeemed from the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 20 years. Because it is not probable that any individual investment will be sold, the value of each individual investment has been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

Private Equity Funds: This type includes 8 private equity funds that invest primarily in leveraged buyouts. The values of the investments in this type have been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital. These investments can never be redeemed from the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 20 years. Because it is not probable that any individual investment will be sold, the value of each individual investment has been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital.

Private Debt Funds: This type includes 2 private debt funds that invest primarily in direct lending loans. The values of the investments in this type have been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital. These investments can never be redeemed from the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. It is expected that the underlying assets of the funds will be liquidated over the next 20 years. Because it is not probable that any individual investment will be sold, the value of each individual investment has been determined using the NAV per share (or its equivalent) of the portfolio's ownership interest in partners' capital.

Comingled Mutual Funds: This type includes investments in an open-end mutual fund that emphasizes broad diversification and consistent exposure to emerging market small company stocks. The value of the investment in this type has been determined using the NAV per share of the investment.

The System does not anticipate restrictions, other than those outlined in the table, on the ability to sell individual investments at the measurement date. Additionally, the System does not anticipate that NAV-driven investments will become redeemable at valuations materially different from the corresponding NAV on the previous page. The System has no prescribed time frame to liquidate the investments.

Custodial Credit Risk of Investments: 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, 2023, the System had uninsured and uncollateralized deposits translated to approximately \$22,583,000 with its custodial agent.

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. Short-term investments include United States Treasury bills that mature in less than 90 days.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

The following table presents the System's fixed income securities subject to credit risk (amounts in thousands):

Investment Type	AAA	AA	A	BBB	BB	B
Asset backed securities	\$ 35,900	\$ 16,390	\$ 46,690	\$ 27,704	\$ 18,568	\$ 1,271
Bank loans	-	-	-	1,564	11,901	9,982
Commercial mortgage-backed	4,884	1,452	2,763	2,937	289	2,549
Corporate bonds	-	7,811	185,555	867,579	722,166	461,781
Corporate convertible bonds	-	-	-	14,880	15,053	676
Government agencies	-	238	-	12,500	7,107	-
Government bonds	-	-	-	8,277	9,573	1,261
Government mortgage-backed securities	-	-	3,899	64,312	28,426	13,521
Gov't-issued commercial mortgage-backed	-	-	-	1,103	-	-
Index linked government bonds	-	-	-	-	-	-
Municipal/Provincial bonds	-	2,453	2,634	-	-	-
Non-government backed C.M.O.s	1,891	-	-	1,752	-	-
Total fixed income	42,675	28,344	241,541	1,002,608	813,083	491,041
Short-term investments	-	-	-	-	-	-
	<u>\$ 42,675</u>	<u>\$ 28,344</u>	<u>\$ 241,541</u>	<u>\$ 1,002,608</u>	<u>\$ 813,083</u>	<u>\$ 491,041</u>

Investment Type	Government						Total
	CCC	CC	C	D	Not Rated	Securities	
Asset backed securities	\$ -	\$ -	\$ -	\$ -	\$ 126,994	\$ 3,556	\$ 277,073
Bank loans	-	-	-	-	5,218	-	28,665
Commercial mortgage-backed	375	-	-	26	149,634	-	164,909
Corporate bonds	55,578	-	-	-	67,692	-	2,368,162
Corporate convertible bonds	20,058	-	-	-	47,336	-	98,003
Government agencies	-	-	-	-	1,341	5,797	26,983
Government bonds	-	-	-	-	3,618	1,062,000	1,084,729
Government mortgage-backed securities	-	-	-	-	4,735	641,839	756,732
Gov't-issued commercial mortgage-backed	-	-	-	-	-	3,877	4,980
Index linked government bonds	-	-	-	-	-	6,433	6,433
Municipal/Provincial bonds	-	-	-	-	-	-	5,087
Non-government backed C.M.O.s	94	-	-	-	48,958	-	52,695
Total fixed income	76,105	-	-	26	455,526	1,723,502	4,874,451
Short-term investments	-	-	-	-	86,204	135,151	221,355
	<u>\$ 76,105</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 26</u>	<u>\$ 541,730</u>	<u>\$ 1,858,653</u>	<u>\$ 5,095,806</u>

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. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates based upon the present value of cash flows, weighted for those cash flows as a percentage of the investment's full price. Effective duration estimates the sensitivity of a bond's price to interest rate changes and makes assumptions regarding the most likely timing and amounts of variable cash flows arising from investments such as callable bonds, collateralized mortgage obligations, and other mortgage-backed securities. 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, 2023, the System had the following investments with maturities (dollars in thousands):

Investment Type	Fair Value	Effective Duration in Years
Asset-backed securities	\$ 277,073	2.6
Bank Loans	28,665	0.2
Commercial mortgage-backed	164,909	1.8
Corporate bonds	2,368,162	4.3
Corporate convertible bonds	98,003	1.5
Government agencies	26,983	5.7
Government bonds	1,084,729	13.4
Government mortgage-backed securities	756,732	6.9
Government issued commercial mortgage-backed	4,980	5.7
Index linked government bonds	6,433	15.4
Municipal/Provincial bonds	5,087	10.6
Non-government backed CMOs	52,695	5.0
Total fixed income and portfolio duration	<u>\$ 4,874,451</u>	<u>6.5</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, 2023, 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, 2023, 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	Other Investments	Grand Total
Argentine Peso	\$ -	\$ -	\$ -	\$ -	\$ 18	\$ -	\$ 18
Australian Dollar	107,936	-	-	(3,706)	561	-	104,791
Brazilian Real	32,231	-	-	(222)	416	-	32,425
British Pound Sterling	423,217	-	-	18,352	1,527	-	443,096
Canadian Dollar	183,282	-	-	6,448	880	-	190,610
Chilean Peso	3,940	-	-	-	160	-	4,100
Colombian Peso	1,638	-	-	-	32	-	1,670
Czech Koruna	3,336	-	-	(2,958)	102	-	480
Danish Krone	53,225	-	-	6,039	197	-	59,461
Euro	821,619	6,002	-	33,776	1,884	36,381	899,662
HK offshore Chinese Yuan Renminbi	18,148	-	-	-	421	-	18,569
Hong Kong Dollar	131,641	-	-	(10,775)	1,784	-	122,650
Hungarian Forint	1,185	-	-	-	70	-	1,255
Indonesian Rupiah	12,275	-	3,618	-	312	-	16,205
Japanese Yen	390,482	-	-	13,913	2,824	-	407,219
Malaysian Ringgit	20,035	-	-	-	198	-	20,233
Mexican Peso	16,132	-	-	3,152	160	-	19,444
New Israeli Shekel	3,538	-	-	1,380	59	-	4,977
New Taiwan Dollar	151,866	-	-	(108)	353	-	152,111
New Zealand Dollar	2,940	-	-	-	74	-	3,014
Norwegian Krone	6,604	-	-	1,584	200	-	8,388
Phillipine Peso	17,145	-	-	-	83	-	17,228
Polish Zloty	14,166	-	-	(7,800)	125	-	6,491
Qatari Rial	9,942	-	-	-	199	-	10,141
Singapore Dollar	29,828	-	-	(10,652)	158	-	19,334
South African Rand	25,749	-	3,266	(6,908)	357	-	22,464
South Korean Won	113,946	-	-	(59)	571	-	114,458
Swedish Krona	54,856	-	-	5,861	350	-	61,067
Swiss Franc	160,150	-	-	13,256	160	-	173,566
Thai Baht	25,644	-	-	-	176	-	25,820
Turkish Lira	15,044	-	-	(8,111)	100	-	7,033
UAE Dirham	8,968	-	-	-	104	-	9,072
Total	\$ 2,860,708	\$ 6,002	\$ 6,884	\$ 52,462	\$ 14,615	\$ 36,381	\$ 2,977,052

Derivative Instruments: The System's investment derivatives include forward currency and futures contracts. These investments are not speculative in nature and do not increase investment risk beyond allowable limits specified in the System's investment policy. A futures contract is a contract to buy or sell units of an index or financial instrument at a specified future date at a price agreed upon when the contract is originated. The System purchases and sells futures contracts as a means of adjusting the TRS portfolio mix at a lower transaction cost than the transactions, which would otherwise occur in the underlying portfolios.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

During fiscal year ended June 30, 2023, S&P 500 futures and U.S. Treasury note futures were utilized. Upon entering into such a contract, the System pledges cash or U.S. government securities to the broker equal to the minimum initial margin requirement of the futures exchange. Additionally, TRS receives or pays a daily variation margin, which is an amount of cash equal to the daily fluctuation in value of the contract. The change in fair value of the futures contracts is presented in the statement of changes in fiduciary net position as "Net change in fair value of investments." The net change in fair value from futures contracts for fiscal year ended June 30, 2023, was (\$575,940). At June 30, 2023, the foreign currency futures contracts outstanding were as follows:

Description	Expiration Date	Open Position	Number of Contracts	Fair Value	Notional Value
DAX Index Futures	September 2023	Long	1	\$ 887,638	\$ 869,865
EURO STOXX 50 Index Futures	September 2023	Long	1	6,085,620	5,913,393
FTSE Taiwan Index Futures	July 2023	Long	1	1,906,740	1,921,860
Hang Seng Index Futures	July 2023	Long	1	2,999,866	3,000,566
Singapore Index Futures	July 2023	Long	1	1,310,972	1,280,975
10-year U.S. Treasury note	September 2023	Long	3	278,306,484	281,619,410
5-year U.S. Treasury note	September 2023	Long	1	41,445,281	41,984,879
U.S. Treasury bond	September 2023	Long	2	96,034,219	95,544,996
U.S. Treasury note	September 2023	Long	1	63,245,625	63,757,125
Russell 2000 Index Futures	September 2023	Long	1	4,188,140	4,166,913
S&P 500 Index	September 2023	Long	2	46,902,213	45,600,108
FTSE 100 Index Futures	September 2023	Long	1	3,164,003	3,153,892
Russell Mid Cap Index Futures	September 2023	Long	1	4,759,380	4,642,161
S&P Canada TSX 60 Index Futures	September 2023	Long	1	2,578,560	2,520,986
TOPIX Index Futures	September 2023	Long	1	4,749,023	4,754,109
FTSE South Africa All Share Index Futures	September 2023	Long	1	827,152	849,415
Australia SPI 200 Futures	September 2023	Long	1	2,740,864	2,737,421
U.S. Treasury bond	September 2023	Long	3	362,571,156	361,122,812
2-year U.S. Treasury note	September 2023	Long	3	199,073,531	200,765,378
5-year U.S. Treasury note	September 2023	Short	2	(93,707,031)	(94,878,453)
U.S. Treasury bond	September 2023	Short	1	(7,355,813)	(7,229,843)
U.S. Treasury note	September 2023	Short	2	(207,502,500)	(208,310,909)
				<u>\$ 815,211,123</u>	<u>\$ 815,787,062</u>

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.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 3. Cash and Investments (Continued)

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. The System enters into foreign exchange forward contracts for TRS to manage foreign currency exposure, as permitted by portfolio policies. The fair values of the contracts are presented in the Statement of Fiduciary Net Position as Investments, at fair value – Equities. The change in fair value of the forward contracts is presented in the statement of changes in fiduciary net position as “Net change in fair value of investments.” The net change in fair value from foreign currency forward contracts for fiscal year ended June 30, 2023, was \$479,384. At June 30, 2023, the foreign currency forward contracts outstanding were as follows:

Description	Fair Value (U.S. Dollars)	Currency	Value Date	Notional Value
Forward sale	\$ (2,930,562)	CZK	9/20/2023	\$ (2,957,859)
Forward sale	(5,438,405)	EUR	9/20/2023	(5,502,495)
Forward sale	(7,711,312)	PLN	9/20/2023	(7,800,460)
Forward sale	(25,891,069)	USD	9/20/2023	(25,891,069)
Forward purchase	6,447,907	CAD	9/20/2023	6,423,033
Forward purchase	13,256,473	CHF	9/20/2023	13,226,346
Forward purchase	6,039,074	DKK	9/20/2023	6,004,365
Forward purchase	36,787,181	EUR	9/20/2023	36,611,787
Forward purchase	18,352,088	GBP	9/20/2023	18,328,609
Forward purchase	3,152,037	MXN	9/20/2023	3,141,771
Forward purchase	41,145,795	USD	9/20/2023	41,145,795

Rate of Return - Pension: For the year ended June 30, 2023, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 7.58 percent. The money-weighted rate of return expresses investment performance, net of investment expense, as adjusted for the changing amounts actually invested.

Rate of Return - OPEB: For the year ended June 30, 2023, the annual money-weighted rate of return on OPEB plan investments, net of OPEB plan investment expense, was 7.50 percent. The money-weighted rate of return expresses investment performance, net of investment expense, as adjusted for the changing amounts actually invested.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 4. 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. The securities on loan as of June 30, 2023, collateralized by cash were approximately \$628,709,000 and the cash collateral received for those securities on loan was approximately \$642,265,000. Securities on loan as of June 30, 2023, consisted of equity loans, corporate fixed income and US government and agencies securities collateralized by cash and non-cash securities. Because the System cannot pledge or sell collateral securities and letters of credit received unless the borrower defaults, the collateral and related liability are not presented in the accompanying statements of fiduciary net position.

The following table describes the types of securities lent and collateral as of June 30, 2023 (dollars in thousands):

	Fair Value of Securities on Loan	Cash Collateral Value	Collateral Percentage
Governmental loans compared to collateral	\$ 2,972	\$ 3,051	103%
Equity loans compared to collateral	231,191	236,987	103%
Corporate loans compared to collateral	394,546	402,227	102%
	<u>\$ 628,709</u>	<u>\$ 642,265</u>	

At June 30, 2023, the System had minimal collateral risk 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.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 4. Securities Lending Activities (Continued)

At June 30, 2023, the weighted average maturity of the cash collateral investments was 10 days. The dollar-weighted average maturity of cash collateral investments shall not exceed ninety days. For purposes of this restriction, the average maturity of variable rate instruments will be calculated to the next interest reset date. The Cash Collateral Account's minimum overnight liquidity level shall not be less than twenty percent. 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 5. Capital Assets

Capital assets consist of the following at June 30, 2023:

	Balance		Balance	
	June 30, 2022	Additions	Deletions	June 30, 2023
Furniture, fixtures and equipment	\$ 6,139,478	\$ 555,298	\$ -	\$ 6,694,776
Accumulated depreciation	(2,613,942)	(693,883)	-	(3,307,825)
Capital assets, net	<u>\$ 3,525,536</u>			<u>\$ 3,386,951</u>

Note 6. Member and Employer 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 pay 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 year ended June 30, 2023, were \$512,972,678. Employers satisfied 100 percent of their contribution requirements for 2023.

All members must contribute 7.0 percent of regular annual compensation, not to exceed the member's maximum compensation level, which for the year ended June 30, 2023, was the full amount of regular annual compensation.

The employers are required to contribute a fixed percentage of annual compensation on behalf of active members. 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 year 2023 are applied on the full amount of the member's regular annual compensation up to certain limits prescribed by the IRC.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 7. Benefits

The System provides defined retirement benefits based on members' final compensation, age, and years 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 who joined TRS after July 1, 1991, become fully vested in retirement benefits earned to date after five years of credited service. Members who joined TRS on or after November 1, 2017, become fully vested after seven years of credited service. Any member who has attained age fifty-five (55) or who has completed thirty (30) years of creditable service, or for any person who initially became a member prior to July 1, 1992, whose age and number of years of creditable service total eighty (80) may be retired upon proper application for retirement on forms established by the System and executing a retirement contract. Any person who became a member after June 30, 1992, but prior to November 1, 2011, whose age and number of years of creditable service total ninety (90) may be retired upon proper application for retirement and executing a retirement contract. Any person who becomes a member on or after November 1, 2011, who attains the age of sixty-five (65) years or who reaches a normal retirement date having attained a minimum age of sixty (60) years may be retired upon proper application for retirement and executing a retirement contract.
- 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 years 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 an active member, the System will pay \$18,000 to the designated beneficiary, in addition to the member's account balance and applicable interest.
- 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.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 7. Benefits (Continued)

- Upon separation from the System, members' contributions are refundable with interest based on certain restrictions provided in the plan, or by the IRC.

Supplemental Health Insurance Program (OPEB Plan)

The System makes payments to certain retiree health insurance providers that are subsidies to help pay for certain supplemental health benefits that are available to eligible retired members who elect such coverage. The subsidy payments are made to the Employees Group Insurance Division (EGID) of the Office of Management and Enterprise Services (OMES) for retirees who opt to continue their employer-provided insurance and are also made to employers who provide health insurance options through other insurers as long as the plans provide health insurance options to both the employers' active and retired employees.

All retirees are eligible except for special retirees (as defined) and spouses and beneficiaries as long as they have at least 10 years of service. Retirees who elect such coverage receive the smaller of (i) a Medicare supplement benefit, if eligible, or (ii) an amount between \$100 and \$105 per month, depending on service and final average compensation. Payments are made on their behalf monthly (i) to EGID as described above, if the member continues health coverage under that Plan, or (ii) to the member's former employer, if the member retains health coverage under a plan maintained by the former employer as described above. The amounts paid to EGID or local employers were approximately \$34,922,000 in 2023 and are included in retirement and other benefits expense.

Employer and employee contributions are made based upon the TRS Plan provisions contained in Title 70 of the Oklahoma Statutes, as amended. However, the statutes do not specify or identify any particular contribution source to pay the health insurance subsidy. The cost of the subsidy averages 0.12% of normal cost, as determined by an actuarial valuation.

Each employer in the OPEB Plan discloses the employer's own apportioned elements of the OPEB plan.

Assumptions: For OPEB, the actuarial valuation date was performed as of June 30, 2023. The measurement date was June 30, 2023. The benefits are only available to those retirees that participate and have at least 10 years of service credit at retirement.

Note 8. Dedicated Tax

The plan receives funds provided by the State of Oklahoma, a non-employer contributing entity, through 5.25 percent of the State's sales, use, and corporate and individual income taxes collected as dedicated tax. The System receives 1.0 percent of the cigarette taxes collected by the State and receives 5 percent of the first \$65 million of net lottery proceeds collected by the State. The System received approximately \$466,647,000 from the State in 2023. Amounts due from the State were approximately \$55,202,000 at June 30, 2023.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 9. DB Plans (Pension and OPEB Actuarial Information)

The components of the net pension liability of the employers at June 30, 2023, were as follows:

Total pension liability	\$ 28,090,258,604
Plan fiduciary net position	<u>(20,383,783,716)</u>
Employers' net pension liability	<u>\$ 7,706,474,888</u>

Plan fiduciary net position as a percentage of the total pension liability	72.57%
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The components of the net OPEB asset at June 30, 2023, were as follows:

Total OPEB liability	\$ 419,483,308
Plan fiduciary net position	<u>(469,851,380)</u>
Employers' net OPEB asset	<u>\$ (50,368,072)</u>

Plan fiduciary net position as a percentage of the total OPEB asset	112.01%
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The total pension and OPEB liability and total pension and OPEB asset as of June 30, 2023, were determined based on actuarial valuations prepared as of June 30, 2023, using the following actuarial assumptions:

- Actuarial Cost Method—Entry Age Normal
- Inflation—2.25 percent
- Future Ad Hoc Cost-of-living Increases—None
- Salary Increases—Composed of 2.25 percent wage inflation, plus 0.75% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service
- Investment Rate of Return, net of investment expenses —7.00 percent
- Retirement Age— Experience-based table of rates based on age, service, and gender. Adopted by the Board in July 2020 in conjunction with the five year experience study for the period ending June 30, 2019
- Mortality Rates after Retirement— Males: 2020 GRS Southwest Region Teacher Mortality Table. Generational mortality improvements in accordance with the Ultimate MP scales are projected for the year 2020. Females: 2020 GRS Southwest Region Teacher Mortality Table. Generational mortality improvements in accordance with the Ultimate MP scales are projected from the year 2020.
- Mortality Rates for Active Members— Pub-2010 Teachers Active Employee Mortality table. Generational mortality improvements in accordance with the Ultimate MP scales are projected from the year 2010.

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 9. DB Plans (Pension and OPEB Actuarial Information) (Continued)

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 fair value of assets (not the smoothed actuarial value of assets seen in actuarial valuations based on the Board's adopted assumptions and methods).

For the valuation period ending June 30, 2023, a single discount rate of 7.00% was used to measure the total pension liability. 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.

The target asset allocation and best estimates of arithmetic expected real rates of return for each major asset class as of June 30, 2023, are summarized in the following table:

Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return
Domestic Equity	38.3%	4.6%
International Equity	16.7%	5.2%
Domestic Fixed Income	22.0%	1.8%
Real Estate**	10.0%	4.4%
Private Equity	8.0%	7.3%
Private Debt	5.0%	5.3%
Total	100.0%	

** The Real Estate total expected return is a combination of Core Real Estate (25% leverage) and Non-Core Real Estate (100% leverage).

Teachers' Retirement System of Oklahoma

Notes to Financial Statements

Note 9. DB Plans (Pension and OPEB Actuarial Information) (Continued)

Sensitivity of the Net Pension Liability and Net OPEB Asset to the Single Discount Rate Assumptions: The following table provides the sensitivity of the net pension liability and net OPEB asset to changes in the discount rate as of June 30, 2023. In particular, the table presents the plan's net pension liability and net OPEB asset, if they 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 (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net pension liability	<u>\$ 11,130,817,250</u>	<u>\$ 7,706,474,888</u>	<u>\$ 4,871,638,760</u>
	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Net OPEB asset	<u>\$ (5,088,921)</u>	<u>\$ (50,368,072)</u>	<u>\$ (88,655,626)</u>

Due to the structure of OPEB plan, healthcare cost trend rate sensitivity analysis is not meaningful.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of Changes in Employers' Net Pension Liability (Unaudited)
Fiscal Year Ended June 30,

	Year Ended June 30									
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability:										
Service cost	\$ 551,183,763	\$ 513,417,762	\$ 516,376,790	\$ 482,233,224	\$ 444,005,366	\$ 432,592,587	\$ 446,728,754	\$ 428,904,761	\$ 415,702,261	\$ 409,199,801
Interest	1,880,323,172	1,824,570,006	1,783,511,996	1,709,647,749	1,628,247,388	1,586,869,029	1,599,025,933	1,609,511,334	1,538,893,982	1,491,722,137
Benefit changes	-	-	-	425,115,415	-	18,410,937	-	-	-	-
Difference between actual and expected return	(102,668,234)	63,391,373	(154,121,356)	247,417,000	418,186,187	(99,947,351)	(373,928,623)	(36,212,168)	(159,980,414)	(105,344,633)
Assumption changes	-	-	-	1,276,379,957	-	-	(482,042,966)	933,294,515	346,488,630	-
Benefit payments	(1,598,943,437)	(1,559,682,030)	(1,485,469,024)	(1,396,258,730)	(1,378,984,998)	(1,323,912,271)	(1,281,816,606)	(1,257,276,705)	(1,201,350,907)	(1,153,051,607)
Refunds	(50,552,204)	(38,398,988)	(31,939,815)	(35,183,705)	(38,002,018)	(42,940,983)	(40,944,298)	(36,109,832)	(35,240,176)	(28,718,256)
Net change in total pension liability	679,343,060	803,298,123	628,358,591	2,709,350,910	1,073,451,925	571,071,948	(132,977,806)	1,642,111,905	904,513,376	613,807,442
Total pension liability:										
Beginning	27,410,915,544	26,607,617,421	25,979,258,830	23,269,907,920	22,196,455,995	21,625,384,047	21,758,361,853	20,551,132,567	19,646,619,191	19,032,811,749
Ending (a)	28,090,258,604	27,410,915,544	26,607,617,421	25,979,258,830	23,269,907,920	22,196,455,995	21,625,384,047	22,193,244,472	20,551,132,567	19,646,619,191
Plan fiduciary net position:										
Contributions-Employer/State	1,023,973,289	967,409,217	769,539,189	816,756,915	817,833,074	757,678,568	698,695,713	725,425,216	728,442,070	707,052,675
Contributions-Members	371,519,419	366,066,840	343,474,401	340,057,646	325,766,148	312,866,576	292,949,337	294,459,090	303,677,304	301,300,811
Net investment income (loss)	1,443,055,046	(2,026,810,561)	5,419,605,754	117,011,982	785,418,295	1,455,605,848	1,945,898,975	(357,443,247)	428,855,747	2,571,707,952
Benefit payments	(1,598,943,437)	(1,559,682,030)	(1,485,469,024)	(1,396,258,730)	(1,378,984,998)	(1,323,912,271)	(1,281,816,606)	(1,257,276,705)	(1,201,350,906)	(1,153,051,607)
Refunds	(50,552,204)	(38,398,988)	(31,939,815)	(35,183,705)	(38,002,018)	(42,940,983)	(40,944,298)	(36,109,832)	(35,240,176)	(28,718,256)
Administrative expense	(6,805,284)	(5,837,976)	(5,446,164)	(5,266,375)	(5,194,983)	(4,200,021)	(4,028,080)	(4,458,336)	(4,358,938)	(4,282,605)
Net change in plan fiduciary net position	1,182,246,829	(2,297,253,498)	5,009,764,341	(162,882,267)	506,835,518	1,155,133,717	1,610,755,041	(635,403,814)	220,025,101	2,394,008,970
Plan fiduciary net position:										
Beginning	19,201,536,887	21,498,790,385	16,489,026,044	16,651,944,311	16,145,108,793	14,989,975,076	13,379,220,035	14,449,506,469	14,229,481,368	11,835,472,398
Ending (b)	20,383,783,716	19,201,536,887	21,498,790,385	16,489,062,044	16,651,944,311	16,145,108,793	14,989,975,076	13,814,102,655	14,449,506,469	14,229,481,368
Plan's net pension liability (a)-(b)	\$ 7,706,474,888	\$ 8,209,378,657	\$ 5,108,827,036	\$ 9,490,196,786	\$ 6,617,963,609	\$ 6,051,347,202	\$ 6,635,408,971	\$ 8,379,141,817	\$ 6,101,626,098	\$ 5,417,137,823

See notes to required supplementary information.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of Employers' Net Pension Liability (Unaudited)
Fiscal Years Ended June 30,

	Year Ended June 30									
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	\$ 28,090,258,604	\$ 27,410,915,544	\$ 26,607,617,421	\$ 25,979,258,830	\$ 23,269,907,920	\$ 22,196,455,995	\$ 21,625,384,047	\$ 22,193,244,472	\$ 20,551,132,567	\$ 19,646,619,191
Plan fiduciary net position	20,383,783,716	19,201,536,887	21,498,790,385	16,489,026,044	16,651,908,311	16,145,072,793	14,989,675,076	13,814,102,655	14,449,506,469	14,229,481,368
Employers' net Pension liability	\$ 7,706,474,888	\$ 8,209,378,657	\$ 5,108,827,036	\$ 9,490,232,786	\$ 6,617,999,609	\$ 6,051,383,202	\$ 6,635,708,971	\$ 8,379,141,817	\$ 6,101,626,098	\$ 5,417,137,823
Employers' fiduciary net position as a percentage of the total pension liability	72.57%	70.05%	80.80%	63.47%	71.56%	72.74%	69.32%	62.24%	70.31%	72.43%
Covered payroll	\$ 5,336,158,616	\$ 5,015,138,698	\$ 4,822,734,551	\$ 4,739,701,022	\$ 4,473,511,671	\$ 4,149,557,077	\$ 4,070,723,673	\$ 4,206,558,429	\$ 4,338,247,200	\$ 4,304,297,300
Employers' net pension liability as a percentage of covered payroll	144.42%	163.69%	105.93%	200.23%	147.94%	145.83%	163.00%	199.19%	140.65%	125.85%

See notes to required supplementary information.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

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

	2023	2022	2021	2020	2019
Actuarially determined contributions	\$ 944,500,075	\$ 867,618,995	\$ 829,510,343	\$ 810,488,875	\$ 760,496,984
Contributions in relation to the actuarially determined contribution:					
Employers (Schools)	510,241,100	495,861,085	458,248,765	457,391,205	446,161,917
State of Oklahoma, a non-employer contributing entity	<u>513,732,189</u>	<u>471,548,132</u>	<u>311,290,424</u>	<u>359,365,710</u>	<u>371,671,157</u>
Contribution deficiency (excess)	<u>\$ (79,473,214)</u>	<u>\$ (99,790,222)</u>	<u>\$ 59,971,154</u>	<u>\$ (6,268,040)</u>	<u>\$ (57,336,090)</u>
Covered payroll	<u>\$ 5,336,158,616</u>	<u>\$ 5,015,138,698</u>	<u>\$ 4,822,734,551</u>	<u>\$ 4,739,701,022</u>	<u>\$ 4,473,511,671</u>
Contributions as a percentage of covered payroll	<u>19.19%</u>	<u>19.29%</u>	<u>15.96%</u>	<u>17.23%</u>	<u>18.28%</u>
	2018	2017	2016	2015	2014
Actuarially determined contributions	\$ 705,424,703	\$ 689,580,590	\$ 723,528,050	\$ 550,652,420	\$ 602,936,966
Contributions in relation to the actuarially determined contribution:					
Employers (Schools)	413,068,467	396,743,812	409,753,221	392,051,458	386,895,127
State of Oklahoma, a non-employer contributing entity	<u>344,610,101</u>	<u>301,951,901</u>	<u>315,671,995</u>	<u>336,390,612</u>	<u>320,157,548</u>
Contribution deficiency (excess)	<u>\$ (52,253,865)</u>	<u>\$ (9,115,123)</u>	<u>\$ (1,897,166)</u>	<u>\$ (177,789,650)</u>	<u>\$ (104,115,709)</u>
Covered payroll	<u>\$ 4,149,557,077</u>	<u>\$ 4,070,723,673</u>	<u>\$ 4,206,558,429</u>	<u>\$ 4,338,247,200</u>	<u>\$ 4,304,297,300</u>
Contributions as a percentage of covered payroll	<u>18.26%</u>	<u>17.16%</u>	<u>17.25%</u>	<u>16.79%</u>	<u>16.43%</u>

See notes to required supplementary information

Notes to Schedule:

The covered payroll is an estimate of the actual payroll, imputed from individual member contributions.

The assumption change in fiscal year 2015 is attributable to the new assumptions adopted by the Board in May 2015.

The assumption change in fiscal year 2016 is attributable to the new economic assumptions adopted by the Board in September 2016.

The beginning balances for the total pension liability and the plan fiduciary net position were both restated as of June 30, 2016 to remove \$434,882,619 which will be reported as an OPEB going forward.

The assumption change in fiscal year 2017 is attributable to the change in assumed election rate for the Supplemental Medical Insurance benefit adopted by the Board in August 2017.

The assumption change in fiscal year 2020 is attributable to the new assumptions adopted by the Board in July 2020.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of Investment Returns (Unaudited)
Fiscal Year Ended June 30,

	Year Ended June 30									
	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expenses	7.58%	-9.02%	33.27%	0.71%	4.95%	9.87%	14.72%	-2.50%	3.04%	21.95%

See notes to required supplementary information

Teachers' Retirement System of Oklahoma

Required Supplementary Information

NOTES TO REQUIRED SUPPLEMENTARY INFORMATION:

Actuarially determined contribution rates are calculated as of June 30.

Members and employers contribute based on statutorily fixed rates. The State of Oklahoma contributes a portion 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.

Beginning with fiscal year ending June 30, 2016, the Actuarially Determined Employer Contribution (ADEC) is determined as the employer contribution amount necessary to finance the normal cost and anticipated administrative expenses as well as discharge the Unfunded Actuarial Accrued Liability over a period equal to the funding period for the current actuarial valuation for plan funding purposes (i.e., 21 years as of June 30, 2020). However, in no event shall the amortization period be in excess of a fixed period of twenty (20) years. ADEC rates are calculated as of June 30.

Beginning with the fiscal year ending June 30, 2017, an actuarially determined portion of the employers' contributions (0.05% of pay for FY2023) is allocated to the OPEB Plan and reported under GASB 74. As a result, these contributions are not included in either the actual or actuarially determined contributions above.

The ADEC was previously determined as the total employer contribution necessary to fund the normal cost and to amortize the UAAL as a level percentage of payroll over 30 years.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Remaining Amortization period	14 years
Asset valuation method	5-year smoothed market
Inflation	2.25%
Salary increase	Composed of 2.25% inflation, plus 0.75% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service.
Investment rate of return	7.00%
Retirement age	Experience-based table of rates based on age, service and gender. Adopted by the Board in July 2020 in conjunction with the five year experience study for the period ending June 30, 2019.
Mortality	2020 GRS Southwest Region Teacher Mortality Table for males and females. Generational mortality improvements in accordance with the Ultimate MP scales are projected from the year 2020.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of Changes in Employers' Net OPEB (Asset)/Liability (Unaudited)
Fiscal Years Ended June 30,

	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability:							
Service cost	\$ 6,427,799	\$ 5,975,764	\$ 6,485,892	\$ 6,219,278	\$ 6,160,629	\$ 6,431,010	\$ 6,647,749
Interest on the total OPEB liability	28,691,767	28,813,245	29,144,139	29,667,636	30,349,537	31,012,327	31,728,895
Benefit changes	-	-	-	-	-	-	-
Difference between actual and expected return	(4,843,786)	(2,011,428)	(5,244,071)	(5,384,475)	(9,944,903)	(9,813,028)	(14,186,133)
Assumption changes	-	-	-	25,556,639	-	-	-
Benefit payments	(34,921,903)	(34,556,094)	(35,159,837)	(35,672,198)	(35,701,014)	(36,963,620)	(30,309,127)
Net change in total OPEB liability	(4,646,123)	(1,778,513)	(4,773,877)	20,386,880	(9,135,751)	(9,333,311)	(6,118,616)
Total OPEB liability:							
Beginning	424,129,431	425,907,944	430,681,821	410,294,941	419,430,692	428,764,003	434,882,619
Ending (a)	419,483,308	424,129,431	425,907,944	430,681,821	410,294,941	419,430,692	428,764,003
Plan fiduciary net position:							
Employer contributions	2,731,578	-	6,087,850	914,797	877,762	2,912,563	6,513,158
Employee contributions	-	-	-	-	-	-	-
OPEB net investment income (loss)	34,184,011	(50,851,607)	141,791,999	3,222,561	22,898,575	44,760,425	62,298,027
Benefit payments	(34,921,903)	(34,556,094)	(35,159,837)	(35,672,198)	(35,701,014)	(36,963,620)	(30,309,127)
Administrative expense	(13,321)	-	(29,789)	(4,165)	(3,987)	(11,427)	(26,457)
Net change in plan fiduciary net position	1,980,365	(85,407,701)	112,690,223	(31,539,005)	(11,928,664)	10,697,941	38,475,601
Plan fiduciary net position:							
Beginning	467,871,015	553,278,716	440,588,493	472,127,498	484,056,162	473,358,220	434,882,619
Ending (b)	469,851,380	467,871,015	553,278,716	440,588,493	472,127,498	484,056,161	473,358,220
Employers' Net OPEB liability (asset) (a)-(b)	\$ (50,368,072)	\$ (43,741,584)	\$ (127,370,772)	\$ (9,906,672)	\$ (61,832,557)	\$ (64,625,469)	\$ (44,594,217)

See notes to required supplementary information.

Information to present a 10-year schedule is not currently available.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of Employers' Net OPEB Liability (asset) (Unaudited)
Fiscal Years Ended June 30,

	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability	\$ 419,483,308	\$ 424,129,431	\$ 425,907,944	\$ 430,681,821	\$ 410,294,941	\$ 419,430,692	\$ 428,764,003
OPEB fiduciary net position	469,851,380	467,871,015	553,278,716	440,588,493	472,127,498	484,056,162	473,358,220
Employers' net OPEB liability (asset)	\$ (50,368,072)	\$ (43,741,584)	\$ (127,370,772)	\$ (9,906,672)	\$ (61,832,557)	\$ (64,625,470)	\$ (44,594,217)
Employers' fiduciary net position as a percentage of the total OPEB liability	112.01%	110.31%	129.91%	102.30%	115.07%	115.41%	110.40%
Covered payroll	\$5,336,158,616	\$5,015,138,698	\$4,822,734,551	\$4,739,701,022	\$4,473,511,671	\$4,149,557,077	\$4,070,723,673
Employers' net OPEB liability (asset) as a percentage of covered OPEB payroll	(0.94)%	(0.87)%	(2.64)%	(0.21)%	(1.38)%	(1.56)%	(1.10)%

See notes to required supplementary information

Information to present a 10-year schedule is not currently available.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of OPEB Contributions From Employers

	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>
Actuarially determined contributions	\$ 2,731,578	\$ -	\$ 6,087,850	\$ 914,797	\$ 877,762
Contributions in relation to the actuarially determined contribution:					
Employers	<u>2,731,578</u>	<u>-</u>	<u>6,087,850</u>	<u>914,797</u>	<u>877,762</u>
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
Covered payroll	<u>\$ 5,336,158,616</u>	<u>\$ 5,015,138,698</u>	<u>\$ 4,822,734,551</u>	<u>\$ 4,739,701,022</u>	<u>\$ 4,473,511,671</u>
Contributions as a percentage of covered payroll	<u>0.05%</u>	<u>0.00%</u>	<u>0.13%</u>	<u>0.02%</u>	<u>0.02%</u>
	<u>2018</u>	<u>2017</u>			
Actuarially determined contributions	\$ 2,912,563	\$ 6,513,158			
Contributions in relation to the actuarially determined contribution:					
Employers	<u>2,912,563</u>	<u>6,513,158</u>			
Contribution deficiency (excess)	<u>\$ -</u>	<u>\$ -</u>			
Covered payroll	<u>\$ 4,149,557,077</u>	<u>\$ 4,070,723,673</u>			
Contributions as a percentage of covered payroll	<u>0.07%</u>	<u>0.16%</u>			

See notes to required supplementary information.

Information to present a 10-year schedule is not currently available.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Schedule of OPEB Investment Returns (Unaudited)
Fiscal Year Ended June 30,

OPEB Plan	Year Ended June 30						
	2023	2022	2021	2020	2019	2018	2017
Annual money-weighted rate of return, net of investment expenses	7.50%	-10.23%	33.04%	0.70%	4.91%	9.71%	14.72%

See notes to required supplementary information

Information to present a 10-year schedule is not currently available.

Teachers' Retirement System of Oklahoma

Required Supplementary Information

Contributions as a percentage of covered payroll	<u>0.07%</u>	<u>0.16%</u>
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NOTES TO SCHEDULE OF CONTRIBUTIONS

The ADEC is the amount needed to fund the normal cost, the anticipated administrative expenses, and a payment towards eliminating the Unfunded Actuarial Accrued Liability (UAAL). The payment towards eliminating the UAAL is based on an closed period of twenty (20) years calculated as a level percentage of future payroll with the initial period beginning on July 1, 2016.

Methods and Assumptions Used to Determine Contribution Rates:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll
Remaining Amortization period	14 years
Asset valuation method	Market
Inflation	2.25%
Salary increase	Composed of 2.25% inflation, plus 0.75% productivity increase rate, plus step-rate promotional increases for members with less than 25 years of service.
Investment rate of return	7.00%
Retirement age	Experience-based table of rates based on age, service and gender. Adopted by the Board in July 2020 in conjunction with the five year experience study for the period ending June 30, 2019.
Mortality	2020 GRS Southwest Region Teacher Mortality Table for males and females. Generational mortality improvements in accordance with the Ultimate MP scales are projected from the year 2020.
Health Care Trend Rates	Due to the nature of the benefit, health care trend rates are not applicable to the calculation of contribution rates.

Teachers' Retirement System of Oklahoma

Supplementary Information

**Schedule of Investment Expenses
For the Year Ended June 30, 2023**

Investment managers	\$ 45,231,949
Investment consultants	736,250
Investment personnel	<u>513,595</u>
Total investment expenses	<u><u>\$ 46,481,793</u></u>

Teachers' Retirement System of Oklahoma

Supplementary Information

**Schedule of Administrative Expenses
For the Year Ended June 30, 2023**

Salaries and benefits	\$ 4,395,262
General and miscellaneous	948,680
Professional/consultant fees	742,523
Travel and related expenses	38,257
Depreciation expense	693,883
Total administrative expenses	<u>\$ 6,818,605</u>

Teachers' Retirement System of Oklahoma

Supplementary Information

**Schedule of Professional/Consultant Fees
For the Year Ended June 30, 2023**

Actuarial	\$	77,121
Medical		7,500
Legal		169,594
Audit		224,091
Data processing		217,902
Miscellaneous		46,315
Total professional/consultant fees	\$	742,523





Investment Section

For fiscal year ending June 30, 2023, the TRS Investment Portfolio generated an 8.04% net return vs a policy benchmark return of 12.14%. The portfolio return ranked at the 39th percentile of peer funds.



**TEACHERS' RETIREMENT SYSTEM OF OKLAHOMA
PROFESSIONAL CONSULTANTS AND ADVISORS**

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EQT Exeter
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Eide Bailly, LLP *Independent Auditor*
Gabriel, Roeder, Smith & Company, *Actuary*
Northern Trust, *Global Custodian/Securities Lending*

*Indicates that this mandate was terminated during Fiscal Year 2023.

December 1, 2023

Board of Trustees
Teachers' Retirement System of Oklahoma (TRSOK)

Market Overview

Investors entered fiscal year 2023 amongst a very challenging market environment, with both bonds and equities continuing to be pressured. The U.S. Federal Reserve ("Fed"), amongst other central banks, continued to combat high inflation with sharp interest rate hikes. Throughout the year, sentiment appeared to cycle through optimism on achieving a soft landing, to the reality that inflation is still above the Fed's long-term target of 2% and further hikes could lead to a recession. In June of 2022, U.S. headline inflation (CPI) peaked at 8.9% year-over-year. In response to persistently high inflation and a still strong U.S. economy, the Fed continued its rate hiking cycle with three additional 75 basis point (bp) hikes, followed by a 50bp hike in December and three 25bp hikes in the back half of the year. This represents the fastest hiking cycle since the late 1980s. However, by mid-fiscal year, there was confidence in a declining inflationary environment that shifted sentiment.

Headline U.S. inflation showed a steady decline from its peak to end the 2023 fiscal year at 3.0% year-over-year. The declining trend in inflation was followed by a slowing pace of rate hikes by the Fed and offered a source of relief to investors. As a result, risk appetite picked up and was supported by a generally resilient economy and expectations of an interest rate pivot later in 2023. This positive outlook wasn't accepted by everyone, however, as the yield curve remained inverted throughout the year, which has historically signaled a looming recession, and prospects for any rate cuts in the near term has since proven to be premature.

Markets were also tested in the back half of the year through a regional banking crisis and the U.S. debt ceiling debacle. In March 2023, Silicon Valley Bank (SVB) entered receivership with the Federal Deposit Insurance Corporation (FDIC), due to inadequate liquidity and solvency protection, and represents the largest failure of a bank since the GFC. Shortly after SVB's demise, investor concerns regarding Credit Suisse accelerated. Regulators swiftly stepped in with the FDIC fully protecting all depositors and launching the new Bank Term Funding Program to provide liquidity should banks require it. Swiss regulators also stepped in quickly to broker a deal between with UBS buying Credit Suisse at a significant discount. Despite all the chaos, a broader banking crisis was avoided and markets emerged mostly unscathed. The stalemate during the debt ceiling negotiations also threatened to destabilize markets, yet investor confidence remained relatively stable through the ordeal until a resolution was passed.

Despite a rough start to the year, fiscal year 2023 ended on a more positive tone as year-over-year inflation fell throughout the year and economic readings held up stronger than expected. Global equities, as defined by the MSCI All Country World IMI Index, rose 16.1% for the year ending June 30, 2023. Developed markets, both the U.S. and non-U.S. generated strong returns of 18.9% and 18.8%, as

measured by the DJ U.S. Total Stock Market Index and the MSCI EAFE Index, respectively. Emerging markets struggled in the high inflation and rising rate environment, returning 1.8% in USD terms. Driven by the Fed rate tightening magnitude and pace, yields rose sharply in the first few months, then traded range bound for the remaining part of the year. The impact on investment grade returns was relatively muted, as the Bloomberg Aggregate Bond Index declined by 0.9%. As risk-appetite returned, high yield bonds performed well and returned 9.1% over the year, as measured by the Bloomberg U.S. Corporate High Yield Index. Private markets weren't as favorable due to the lag in valuations which came in low, and in places negative, during the year. Overall, more risk-oriented portfolios generally delivered positive mid-to-high single digit total returns for the 2023 fiscal year period.

Overview of TRSOK Fund Structure

The TRSOK portfolio is well-diversified across several asset classes, including U.S. and International public equities, fixed income, private debt, private equity, and real estate. The asset allocation is a long-term Policy determined through periodic asset-liability studies and assessments of risk and liquidity needs. Within these asset classes, the investments are diversified across investment types, styles, regions and vintage years. A variety of investment firms are employed within each category to minimize manager- and firm-specific risks. The diversification and overall risk level of the portfolio is appropriate given the goals and objectives of the TRSOK.

During the 2023 fiscal year, TRSOK completed a structure review of the international equity asset class, which followed the U.S. equity structure review completed in fiscal year 2022. The structure review was focused on streamlining the portfolio, creating efficient, cost-effective exposure and being deliberate with the risk taking. The results of the international equity structure review included significantly increasing low-cost passive management to 55% of the portfolio, eliminating the dedicated small cap manager exposure, streamlining the manager line-up by reducing the number of active managers from five to three, and reducing costs overall by an expected 20 basis points (bps).

Additionally, Aon and the TRSOK Investment Team regularly review the real estate portfolio allocation, structure, and manager line-up, and evaluate additional types of strategies in order to best position the fund to achieve its investment objectives. Identifying investments poised to capitalize on key investment themes was a goal over the course of the last year. Aon and the TRSOK Investment Team identified various opportunities to add complementary exposures through various commingled funds, which offer greater diversification. During the 2023 calendar year, TRSOK committed to three closed-ended commingled funds, \$300 million in aggregate. Additionally, the 2024 annual strategic and pacing plan includes \$200 million to closed-ended strategies and \$100 million to open-ended strategies, providing the TRSOK Investment Staff with ample opportunity to achieve its investment objectives in years to come.

The TRSOK portfolio is reviewed regularly by Aon and the TRSOK Investment Team in order to ensure it is best positioned to achieve its long-term investment objectives.

TRSOK Performance Overview (annualized returns)

Periods ending 6/30/2023	1 Year		3 Years		5 Years		7 Years		10 Years	
	Return	Rank	Return	Rank	Return	Rank	Return	Rank	Return	Rank
Total Fund	8.0	39	9.1	24	6.6	36	8.2%	22	7.8	17
<i>Total Fund Policy Benchmark</i>	12.1	1	9.0	25	7.5	13	8.5	10	8.0	12
Total Equity	15.2	--	12.3	--	6.9	--	9.8	--	9.3	--
<i>Total Equities Policy Benchmark</i>	17.3	--	12.0	--	9.0	--	10.9	--	10.1	--
Total Fixed Income	0.9	30	-3.3	71	1.6	26	1.8	21	2.8	18
<i>Total Fixed Income Policy Benchmark</i>	2.0	16	-1.8	24	1.6	32	1.7	23	2.4	30
Total Real Estate	-4.4	--	6.4	--	5.4	--	5.8	--	N/A	--
<i>Total Real Estate Policy Benchmark</i>	-3.4	--	10.2	--	7.9	--	7.7	--	8.8	--
Total Private Investments	-3.1	--	21.1	--	17.3	--	17.2	--	N/A	--
<i>Total Private Equity Policy Benchmark</i>	16.8	--	15.3	--	8.4	--	13.1	--	12.6	--

The Total Fund ended the fiscal year with approximately \$20.7 billion, representing an increase in assets of approximately \$1.1 billion over the year, primarily due to investment gains. The Total Fund returned 8.0%, net-of-fees, for the 2023 fiscal year period. As inflation numbers continued to fall throughout the year and risky assets benefitted amongst optimism that a soft landing was possible, the economy remaining resilient and hopes of a reversal in Fed policy. Public equities drove absolute returns with a return of 16.1% over the year as represented by the MSCI All Country World IMI Index. As rates generally rose over the fiscal year, fixed income experienced mixed results. Spread sectors, such as high yield, fared better generating a positive 9.1% return, while the broad U.S. market, represented by the Bloomberg Aggregate Bond Index, declined over the year by 0.9%. With private market portfolios reporting on a lagged basis, the real estate and private equity portfolios experienced modest declines over the year. On a relative basis, the Total Fund trailed its Performance Benchmark return of 12.1%. The largest detractor of relative performance came from private equity which is benchmarked against public equity plus a 4% annual premium. Due to the strong rebound in public markets and the lagged nature of private equity reporting, the impact over the one-year period was larger than normal and is expected to moderate over time. Private equity is best measured over long-term (7+ year) time periods. The TRSOK private equity portfolio has earned 17.2% return and outperformed its benchmark by over 4 percentage points over the trailing seven-year period. Public equity was also a detractor to relative performance over the year due to some active manager performance weakness.

Relative to a peer group of U.S. Public Pension Plans with assets over \$1 billion, the Plan's 1-year return ranked above median in the top 39th percentile of its peer group. Longer-term performance also remains positive, as the Total Fund returned an annualized 8.2% over the trailing seven-year period and 7.8% over the trailing ten-year period. Additionally, the Total Fund ranked above median over the trailing five-



year period and in the top quartile over the trailing three-, seven- and ten-year time periods within its peer group. The plan's strong allocation to growth markets, specifically public equity, relative to peers was beneficial.

During the year, the total equity asset class returned 15.2%, trailing its benchmark return by 2.1 percentage points. TRSOK's U.S. equity portfolio, which comprises approximately 75% of the total equity allocation, returned 15.4% and trailed its performance benchmark return of 19.0%. The underperformance of the U.S. equity portfolio was driven primarily by the portfolio's factor-based strategy which was underweight the IT sector which sharply rallied in 2023. TRSOK's international equity portfolio returned 11.2%, also trailing its benchmark by 1.9 percentage points. Underperformance over the year was driven by the international small cap and emerging market manager underperformance. As noted earlier, the international structure review was completed and at the end of the year the portfolio was in a transition period to the newly approved structure. Longer-term absolute performance remains strong, as the Total Equity composite has earned 9.3% over the trailing 10-year period, a return modestly below its performance benchmark.

The TRSOK fixed income portfolio returned a positive 0.9% over the year, trailing its performance benchmark return of 2.0%. Active manager performance was mixed, with half the managers outperforming and half trailing their respective benchmarks. However, as rates rose over the one-year period, the greatest detractor from performance was exposure to long duration bonds which were more sensitive to the rising rate environment. Over the longer-term, the fixed income composite has earned modest absolute results, though has outperformed its performance benchmark over the trailing five-, seven- and ten-year time periods.

Across private markets, including real estate and private equity, returns were challenged for the fiscal year. The impact of higher interest rates began to impact the real estate market. TRSOK's private real estate portfolio, which includes both core and non-core private real estate, declined by 4.4% over the year. TRSOK's core portfolio declined by 3.8%, performing slightly ahead of its benchmark; while the non-core portfolio declined by 5.0%, trailing its performance benchmark by 2.0 percentage points, both on a time-weighted return basis. The recent decline weighed on mid-term performance as the total real estate composite earned an annualized 5.4% return over the trailing five-year period. On an IRR basis, the real estate portfolio has earned a 7.9% internal rate of return (IRR) since its inception.

The private equity portfolio declined by 3.1% on a time-weighted return basis over the one-year period. The private equity portfolio is benchmarked against the Russell 2000 Index + 4% which posted a positive 16.8% over the year. Benchmarking private markets is challenging and over shorter time periods these challenges are often highlighted. Private equity experienced write-downs over the course of the year as 2022 weakness made its way into private market valuations. While this relative underperformance was notable, wide deviations in performance can be expected when public equities experience large performance swings over short periods. Over longer time periods, we expect the relative performance to moderate. Over the trailing 7-year period, the private equity portfolio earned 17.2% and outperformed its



benchmark by 4.1 percentage points. From an internal rate of return (IRR) perspective, the preferred metric for measuring private markets performance, TRSOK's private equity portfolio has earned a 18.2% IRR since its inception through March 31, 2023.

We are pleased to report on the TRSOK portfolio and feel it is well-positioned going forward to achieve its long-term goals.

Sincerely,

A handwritten signature in black ink that reads "Katie Comstock".

Katie Comstock
Partner

A handwritten signature in black ink that reads "R. Scott Coopriider".

R. Scott Coopriider
Associate Partner

Statement of Investment Policies

The policies and procedures of the Teachers' Retirement System of Oklahoma provide for a prudent and systematic investment process on behalf of its members, allowing for reasonable expenses of administration of the System, and providing for an orderly means whereby employees may be retired from active service with all pension benefits allowed by Oklahoma statutes. The Board of Trustees must follow the "prudent investor standard." In making investments, the Board must exercise the judgment, care, skill, prudence, and diligence under the circumstances that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character.

The Board diversifies investments to minimize risk. The investment objectives of the Board, as fiduciaries, are long-term matching the perpetual nature of pension liabilities. The investment portfolio is constructed to provide liquidity for present benefits and to provide investment returns adequate to fund future benefit payments. Board policy takes into consideration actuarial assumptions of the retirement program and any unfunded liabilities. The Board has retained professional internal investment staff, as well as qualified outside investment consulting and actuarial firms.

Basis of Presentation

Investment values and return metrics for the Teachers' Retirement System's portfolio are presented using common investment industry best practices. All information is reported on a time-weighted and net-of-fee basis. It is important to note that these investment values and return metrics may differ from the Financial and Actuarial sections of this report. Both methodologies are relevant and accurate but serve different functions. The most important distinction is the difference in timing between the reported values and return metrics. Investment reporting requires timely information that can be reported in our news releases, Board reports, public statements, and that can be benchmarked against our peer funds. Private market investments are typically reported on a quarter-lagged basis. The Financial and Actuarial statements typically adjust the previous quarter's value to make those results current, whereas the Investment section does not. The values in the Investment section are consistent with the reporting standards of other pension plans and institutional investors.

This report was prepared by,

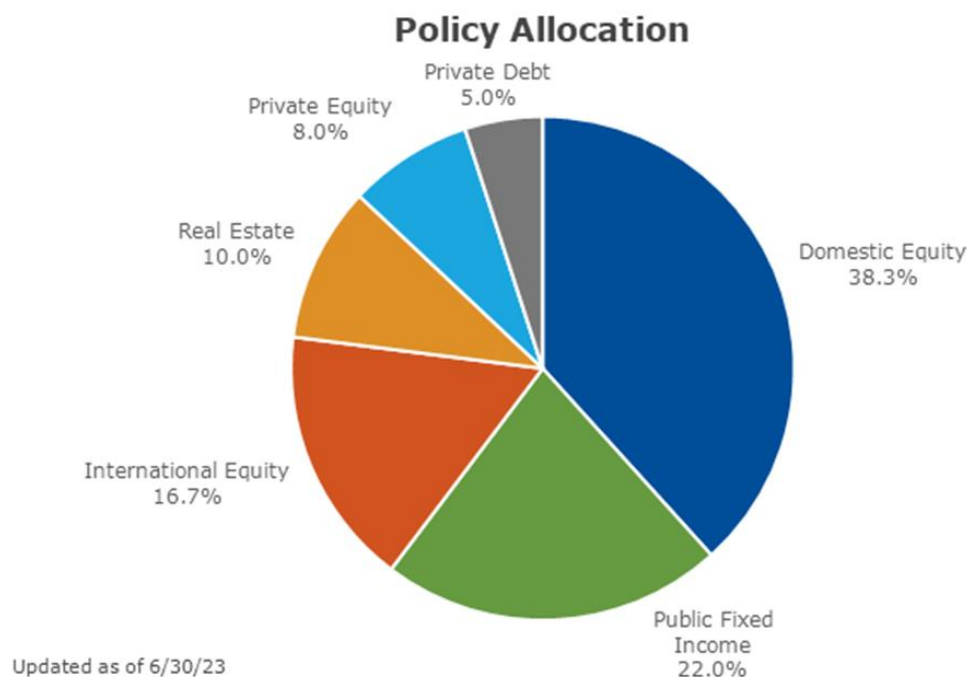
A handwritten signature in blue ink, appearing to read "Joseph Cappello". The signature is stylized and cursive.

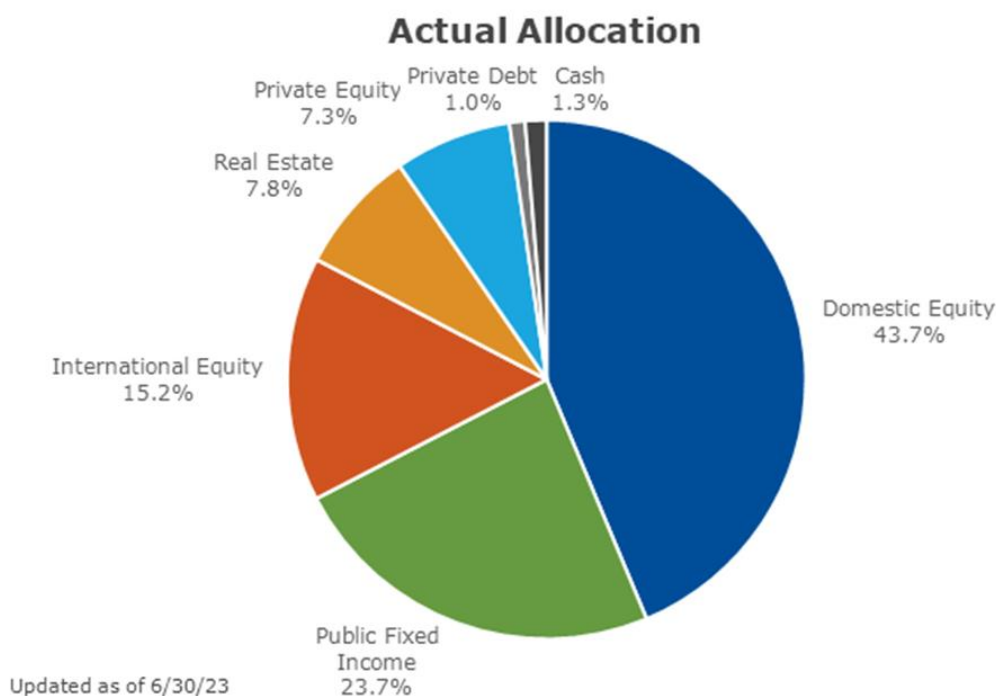
Joseph Cappello, CFA
Deputy Chief Investment Officer

Investment Allocation Policy

In the pursuit of long-term returns to meet or exceed our current actuarial assumption, while maintaining the goal of capital preservation, the System has adopted a policy of diversified asset allocation. The System, in conjunction with Aon, the plan's investment consultant, and Gabriel, Roeder, Smith & Company, the plan's actuary, conducted an in-depth asset-liability study to construct the current target portfolio. The study takes into consideration the Fund's liability structure, return targets, liquidity needs, and time horizon. The resulting diversified portfolio is designed to enhance long-term returns while mitigating short-term volatility. A primary goal of the System is to achieve a net-of-fee return above a policy benchmark over a full business cycle. The policy benchmark consists of each asset class benchmark weighted by the respective asset class policy target. The System is in the process of directing the portfolio's actual allocation towards the Board-approved policy allocation.

All investments are managed by external investment management firms except for the office building that houses the System. The office building has a fair value of \$9,425,000 and it is managed by the Teachers' Retirement System. The policy allocation and the portfolio's actual allocation as of June 30, 2023, are shown below. The System's actual allocation will hold cash equivalent investments sufficient to maintain adequate liquidity in the portfolio to provide for member benefits and capital commitments to partnership vehicles.





The System has dedicated allocation ranges for public market investments as shown in the table below. The portfolio may be periodically re-balanced to ensure that the portfolio maintains the appropriate risk posture. Less liquid private assets such as Real Estate, Private Equity, and Private Debt are not managed within rebalancing ranges but are instead managed to target over time through the annual strategic plans, periodic pacing studies, distributions, and strategic new investments.

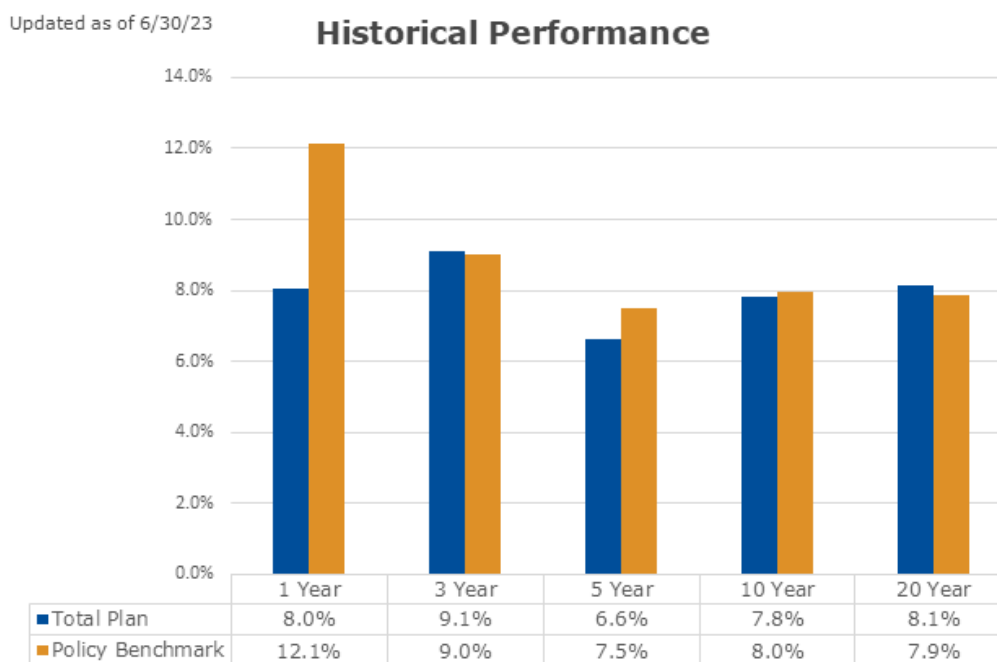
	Minimum	Target	Maximum
Domestic Equity	33.3%	38.3%	43.3%
International Equity	11.7%	16.7%	21.7%
Public Fixed Income	17.0%	22.0%	27.0%
Real Estate	N/A	10.0%	N/A
Private Equity	N/A	8.0%	N/A
Private Debt	N/A	5.0%	N/A
Cash Equiv.	N/A	0.0%	N/A

Investment Performance

For fiscal year 2023, the System realized a time weighted net-of-fee return of 8.04%, compared to the System's policy benchmark return of 12.14%. Returns are calculated by Northern Trust, the System's custodian bank, and are based upon the fair value of assets and accruals along with all portfolio cash flows. The System continues to have strong long-term performance and has outperformed its policy benchmark on its fifteen-, twenty-, and twenty-five-year returns. The policy benchmark is designed to match the risk of our investment portfolio. The ten-year return

has been 7.83%, outperforming the actuarially required rate of return of 7.0% and placing the System in the top quartile of performance versus our pension System peers with assets greater than \$1 billion.

Private market performance, including Real Estate, Private Equity, and Private Debt is often lagged relative to public markets as well as to their strategy benchmark. These investments are commonly in the form of closed-end funds structured as partnerships. The System acts as the Limited Partner and retains institutional-quality investment firms to act as the General Partner. The System invests in private markets for return enhancement, diversification, and to access investment opportunities suited for institutional investors.



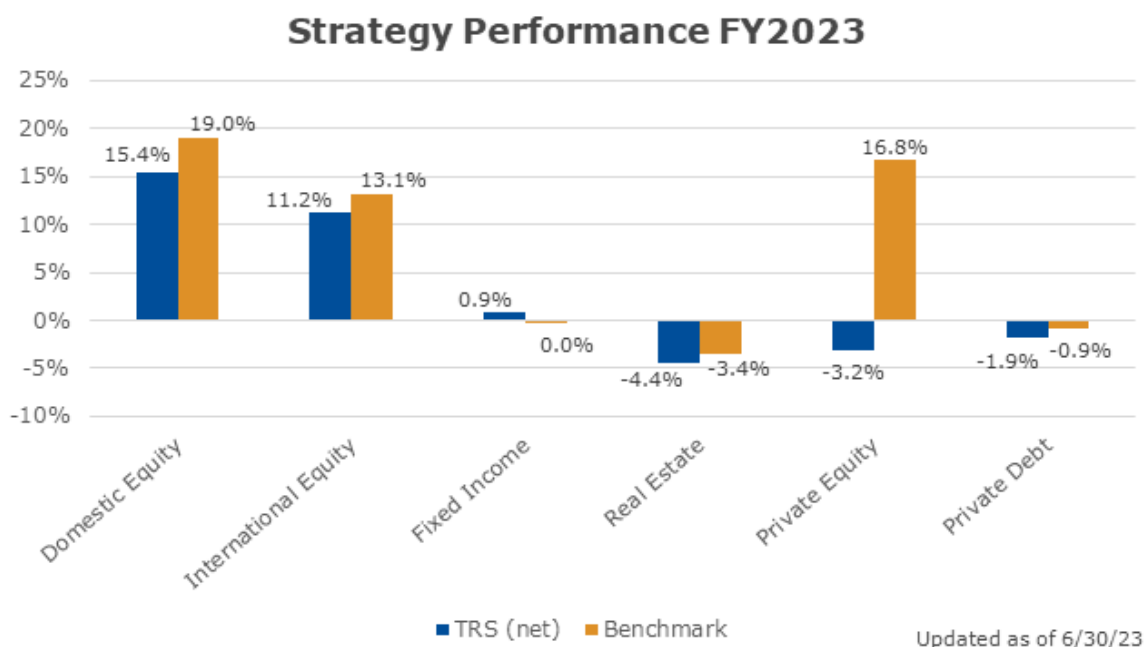
Strategy Performance

To achieve the investment goals set forth by the Oklahoma Teacher's Retirement System Investment Policy Statement, the Board of Trustees employs both indexed and active management. During fiscal year 2023, the Public Domestic Equity strategy was the best returning strategy with an annual time-weighted rate of return of 15.41%.

The System's Domestic and International Equity portfolios have a greater weighting to smaller companies with value characteristics than the overall strategy benchmark. The smaller company bias and the value bias were relative net detractors in the Domestic Equity portfolio. The System's Real Estate portfolio is relatively young, and the underperformance can be primarily attributed to the recent investments that have not yet been fully developed or realized. During the year, the Board significantly restructured the System's equity portfolios and continued the process of restructuring the Real Estate portfolio with the goal of achieving more consistent net excess returns.

The System's private market investment performance is typically lagged relative to their public market benchmarks. Private equity is benchmarked to the Russell 2000 small capitalization public market index, plus a 2.5% risk premium to compensate for illiquidity. Private debt is benchmarked to the Bloomberg Barclays US Universal Index. Real Estate is benchmarked to the NCREIF ODCE Index plus a 0.5% risk premium.

The net-of-fee time-weighted rates of return for fiscal year 2023 for each strategy are shown below.



Strategy	AUM (\$)	Fiscal Year Return	Benchmark Return
Domestic Equity	9,046,617,266	15.41%	18.95%
International Equity	3,156,307,059	11.23%	13.08%
Public Fixed Income	4,911,721,300	0.88%	-0.04%
Real Estate	1,605,616,514	-4.36%	-3.43%
Private Equity	1,510,542,546	-3.21%	16.76%
Private Debt	202,046,336	-1.88%	-0.94%
Cash Equiv.	273,318,473	3.74%	-
Total*	20,706,169,493	8.04%	12.14%

*Not including \$12,280,147 of sanctioned, illiquid Russian assets

Private Market Investment Returns

In addition to the time-weighted returns shown above, the Board of Trustees, internal investment staff, and our retained investment consultant also use separate performance metrics specifically designed for closed-end vehicles, such as internal rate of return, cash distribution multiples, and peer performance when examining the private market allocations.

The Private Equity portfolio currently targets 80% of commitments towards buyout, growth, and turnaround strategies and 20% towards venture capital strategies. To reduce overall fees and enhance long-term returns, the System has also participated in co-investments alongside our private equity partners. The Real Estate portfolio currently targets 50% to core real estate and 50% to value-add and opportunistic real estate. The newly approved Private Debt portfolio targets 60%-100% direct lending and 0%-40% alternative credit.

Closed-end private market vehicles distribute investment sales and income proceeds to investors. These distributions require additional commitments/investments by the System to maintain a stable allocation. Annual pacing studies are performed to ensure that the portfolio's actual allocation is guided towards the policy allocation. Details of these commitments, contributions, distributions, fair values and performance metrics are displayed below.

	Capital Committed (\$M)	Contributions (\$M)	Distributions (\$M)	Fair Value (\$M)	Total Value Multiple (x)	Net IRR (%)
Grand Total	6,142.30	4,133.40	3,649.20	3,323.90	1.7	12.30%
Private Equity	2,472.50	1,858.40	2,150.20	1,549.10	2	17.90%
Private Debt	1,525.00	518.6	544.9	210.1	1.5	12.20%
Real Estate	2,144.80	1,756.40	954.1	1,564.70	1.4	7.20%

Private market vehicles typically charge investors an annual management fee of between 1%-2% of invested capital, which goes to support routine, on-going expenses at the investment management firm. In addition, general partners typically collect performance fees, known as carried interest, when there is positive performance above a hurdle rate. The System's since inception management fees, accrued carried interest, and paid carried interest are shown below.

Strategy	# of Funds	Net Management Fee (\$M)	Carried Interest Accrued (\$M)	Carried Interest Paid (\$M)
Core (RE)	3	55.3	0.9	0
Opportunistic (RE)	9	23.7	11.5	2.7
Secondary (RE)	1	2.3	0.4	0
Value-Added (RE)	13	48.8	18.2	0
Opportunistic (PD)	2	4.3	7.8	0.5
Private Debt (PD)	4	26.0	25.4	23.3
Private Equity	82	106.9	150.9	197.2
Grand Total	114	267.3	215.1	223.7

Benchmark Returns

As of the end of fiscal year 2023, the System's total portfolio policy benchmark consists of 42.8% Russell 3000 Index, 18.7% MSCI ACWI ex-US IMI Index, 15.4% Bloomberg Barclays Aggregate Bond Index, 6.6% ICE High Yield Bond Index, 8.0% Russell 2000 + 400bp, 8.5% ODCE + 50bp. The table below shows returns of the System's asset class benchmarks. Large disparities between System's private market returns and their public market benchmark are largely due to timing differences and valuation techniques.

Domestic Equity	One Year	Three Year	Five Year
Oklahoma Teachers' Total Domestic Equity	15.41%	13.87%	8.51%
<i>Russell 3000</i>	18.95%	13.89%	11.39%
<i>Russell 2000</i>	12.31%	10.82%	4.21%
<i>Russell 2000 Value</i>	6.01%	15.43%	3.54%
<i>Russell 2000 Growth</i>	18.53%	6.10%	4.22%
International Equity	One Year	Three Year	Five Year
Oklahoma Teachers' Total International Equity	11.23%	7.15%	2.50%
<i>MSCI ACWI ex USA IMI</i>	13.08%	7.85%	3.87%
<i>MSCI ACWI ex USA Value</i>	13.03%	11.16%	3.31%
Fixed Income	One Year	Three Year	Five Year
Oklahoma Teachers' Total Fixed Income	0.88%	-3.31%	1.63%
<i>70% BB Barclays US Aggregate/ 30% ML High Yield</i>	1.95%	-1.83%	1.56%
Real Estate	One Year	Three Year	Five Year
Oklahoma Teachers' Real Estate	-4.36%	6.40%	5.37%
<i>NCREIF ODCE + 50bp</i>	-3.24%	6.82%	5.05%
Private Equity	One Year	Three Year	Five Year
Oklahoma Teachers' Private Equity	-3.21%	22.46%	19.51%
<i>Russell 2000 + 4%</i>	16.76%	15.23%	10.17%
Private Debt	One Year	Three Year	Five Year
Oklahoma Teachers' Private Debt	-1.88%	13.77%	7.33%
<i>BB Barclays US Universal</i>	-0.04%	-3.43%	0.98%
Oklahoma Teachers' Total Fund	8.04%	9.12%	6.62%

Largest Holdings

The System's ten largest equity and fixed income holdings by fair value as of June 30, 2023, are listed below. A comprehensive list of the System's investments as of June 30, 2023, may be obtained by contacting the Investment Department.

Security	Ticker	Fair Value	Shares
Apple	AAPL	\$ 342,245,323	1,764,424
Microsoft	MSFT	\$ 310,436,945	911,602
Amazon	AMZN	\$ 145,357,397	1,115,046
Nvidia	NVDA	\$ 114,569,468	270,837
Meta	META	\$ 106,344,170	370,563
Alphabet Class A	GOOGL	\$ 105,182,305	878,716
Johnson & Johnson	JNJ	\$ 90,934,040	549,384
Exxon Mobil	XOM	\$ 88,338,929	823,673
Tesla	TSLA	\$ 82,330,330	314,514
Berkshire Hathaway Class B	BRK.B	\$ 80,610,354	236,394

Security	Par Value	Fair Value
U.S. Treasury Bond Futures Due Sept 23	\$ 2,857	\$ 362,571,156
U.S. Treasury Note 10Yr Futures Due Sept 23	\$ 2,479	\$ 278,306,484
U.S. Treasury Bond 2.5% Due 05-15-2046	\$ 281,710,000	\$ 217,519,065
U.S. Treasury Bond 2.25% Due 08-15-2046	\$ 294,230,000	\$ 217,447,439
U.S. Treasury Note 2Yr Futures Due Sept 23	\$ 979	\$ 199,073,531
U.S. Treasury Bond 1.375% Due 08-15-2050	\$ 247,100,000	\$ 144,855,070
U.S. Ultra Treasury Bond Futures Due Sept 23	\$ 651	\$ 88,678,406
U.S. Treasury Bond 1.25% Due 05-15-2050	\$ 124,030,000	\$ 69,940,661
U.S. Treasury Bond 2.5% Due 02-15-2046	\$ 82,290,000	\$ 64,113,688
GNMA 6% Due 10-20-2052	\$ 56,187,000	\$ 56,533,779

Investment Assets and Management Fees by Strategy

Below is a table detailing the investment management fees and assets under management by investment manager as of June 30, 2023. Management fees are charged to cover the normal expenses and operating costs of administering the portfolio. All fees shown below are specifically for fiscal-year 2023. Carried interest and incentive fees are accrued and not included below.

Domestic Equity

Account Manager	Strategy	AUM (\$)	Total Fees (\$)
Frontier	Domestic Small Cap	450,592,863	1,710,746
Geneva Capital	Domestic Small Cap	435,794,700	1,465,210
Northern Trust	Russell 3000 Index	4,990,352,855	308,495
Northern Trust	SciBeta US 6 Factor Index	3,169,876,848	1,586,560

International Equity

Account Manager	Strategy	AUM (\$)	Total Fees (\$)
Northern Trust	ACWI ex-US ex-China	1,900,681,320	211,773
Causeway Capital	International Large Cap	335,993,159	1,791,630
Wellington	International Large Cap	*	3,126,055
Wasatch	International Small Cap	*	2,046,421
Wellington	International Small Cap	*	2,307,182
SSGA	Emerging Mkts Small Cap	*	781,662

*Indicates that the investment mandate was terminated during Fiscal Year 2023.

Fixed Income

Account Manager	Strategy	AUM (\$)	Total Fees (\$)
Hoisington Investment Co.	Active Duration	714,084,055	663,733
Loomis Sayles	Core Plus Fixed Income	1,425,043,599	3,219,959
Lord Abbett	Core Plus Fixed Income	1,371,143,560	2,157,142
Mackay Shields	Core Plus Fixed Income	1,401,450,085	2,145,257

Real Estate

Account Manager	Strategy	AUM (\$)	Management Fees (\$)
AEW	Core Real Estate	420,731,444	3,211,391
Heitman America Real Estate	Core Real Estate	424,567,523	3,057,252
L&B Core Income Partners	Core Real Estate	189,656	42,159
American Strategic Value	Non-Core Real Estate	127,400,424	1,357,444
Angelo Gordon X	Non-Core Real Estate	43,968,359	650,574
Angelo Gordon XI	Non-Core Real Estate	9,307,849	991,096
Artemis Real Estate III	Non-Core Real Estate	29,191,690	546,214
Artemis Real Estate IV	Non-Core Real Estate	3,173,964	750,000
Blackstone RE Partners X, L.P.	Non-Core Real Estate	3,370,237	533,333
Dune Real Estate III	Non-Core Real Estate	18,729,214	337,540
Dune Real Estate IV	Non-Core Real Estate	47,512,650	800,276
FCP Realty Fund IV, L.P.	Non-Core Real Estate	41,986,698	338,282
FCP Realty Fund V, L.P.	Non-Core Real Estate	70,701,288	1,250,000
GreenOak US II	Non-Core Real Estate	19,242,483	-
GreenOak US III	Non-Core Real Estate	41,921,261	525,050
Harbert European Real Estate V	Non-Core Real Estate	36,381,890	490,843
Invesco Strategic Realty	Non-Core Real Estate	17,138,462	369,068
Invesco Real Estate VI	Non-Core Real Estate	45,203,532	323,761
L&B Golden Driller	Non-Core Real Estate	36,028,062	-
Landmark Real Estate VII	Non-Core Real Estate	5,210,870	62,039
Lyrical-OTRS Realty Partner IV	Non-Core Real Estate	57,554,859	444,005
TPG Real Estate IV	Non-Core Real Estate	4,022,528	1,721,398
Starwood Opportunity X	Non-Core Real Estate	10,989,486	218,550
Starwood Opportunity XI	Non-Core Real Estate	47,595,369	633,146
Starwood Opportunity XII	Non-Core Real Estate	33,696,716	1,500,000

Private Equity / Private Debt

Account Manager	Strategy	AUM (\$)	Management Fees (\$)
Franklin Park	Private Equity	1,504,210,612	1,605,000
Franklin Park	Private Equity - Legacy	6,331,934	-

Private Equity / Private Debt

Account Manager	Strategy	AUM (\$)	Management Fees (\$)
PIMCO Bravo II	Special Opportunities	7,062,535	41,496
PIMCO Bravo III	Special Opportunities	152,461,312	2,182,133
PIMCO COF II	Special Opportunities	45,522,489	524,988

Cash & Other Investment Expenses

Account Manager	Strategy	AUM (\$)	Total Fees (\$)
Northern Trust	STIF Account	273,318,473	291,404
Northern Trust	Tax Reclaims/Transition	931,912,726	-
Northern Trust	Custody		25,000
Aon Investment Management	Investment Consulting		736,250
Meketa Investment Group	Private Market Admin		375,000
Investment Staff			513,595

Schedule of Stock Brokerage Commissions

Brokerage commissions are paid to execute trades and transactions on behalf of the System. Trades are executed as part of the normal management of publicly traded securities as well as transition management services when a mandate is changed or terminated. Brokerage commissions also cover a portion of the external portfolio manager's research needs.

Brokerage Firm	Commissions Paid (\$)	Shares Traded	Commission per Share (\$)
Bank of America Merrill Lynch	192,879	52,353,830	0.004
USB AG	150,815	118,571,099	0.001
Macquarie Bank, Ltd.	99,095	91,808,214	0.001
J.P. Morgan Securities	96,912	21,874,565	0.004
Jefferies, LLC	85,186	9,768,040	0.009
Wells Fargo Bank, LLC	83,558	2,819,755	0.030
Morgan Stanley & Co.	77,855	19,003,084	0.004
Goldman, Sachs, & Co.	70,040	46,746,076	0.001
Pershing LLC	62,231	12,852,466	0.005
Citigroup Global Markets	61,316	21,164,088	0.003
Summary of remaining brokerage firms	1,667,396	520,131,596	0.003
Total	2,647,285	917,092,813	0.003

Summary of Investments
June 30, 2023

<u>Type of Investment</u>	<u>Fair Value</u>	<u>Percentage of Total Fair Value</u>
Fixed Income:		
U S Government Securities	\$ 1,835,469,535	8.79%
Corporate Bonds	2,425,458,720	11.62%
International Bonds	613,521,796	2.94%
Total Fixed Income	<u>4,874,450,051</u>	<u>23.34%</u>
Equities:		
Domestic	8,983,857,781	43.03%
International	3,080,919,423	14.76%
Total Equities	<u>12,064,777,204</u>	<u>57.78%</u>
Other Investments		
Private Equity	1,760,374,699	8.43%
Real Estate	1,514,482,429	7.25%
Total Other Investments	<u>3,274,857,128</u>	<u>15.68%</u>
Short-Term Investments:		
Short-term Investments Northern Trust	528,223,117	2.53%
Money Markets	138,057,144	0.66%
Total Short-Term Investments	<u>666,280,261</u>	<u>3.19%</u>
Total Investments	<u><u>\$ 20,880,364,645</u></u>	<u><u>100.0%</u></u>





Actuarial Section

For fiscal year ending
June 30, 2023, TRS'
funded status was 75.1%
on an actuarial basis.





November 17, 2023

Board of Trustees
Teachers' Retirement System of Oklahoma
Harvey Parkway Building
301 NW 63rd Street, Suite 500
Oklahoma City, OK 73116-7921

Re: ACTUARIAL VALUATION AS OF JUNE 30, 2023

Dear Members of the Board:

At the request of the Teachers' Retirement System of Oklahoma (the System), Gabriel Roeder Smith & Company (GRS) has performed the actuarial valuation of the System. The information in the Actuarial Section is based on our annual actuarial valuation report, with the most recent valuation conducted as of June 30, 2023, and is intended to be used in conjunction with the full report.

This letter and the schedules listed below represent GRS' certification of the funded status as required for the financial report for the fiscal year ended June 30, 2023 for the System. In accordance with GASB Statement No. 67, GRS prepared the Sensitivity of the Net Pension Liability, the Schedule of Changes in the Employers' Net Pension Liability, the Schedule of Contributions from Employers, and the Notes to Schedule of Contributions presented in the Financial Section of this report. In accordance with GASB Statement No. 74, GRS prepared the Sensitivity of the Net OPEB Liability, the Schedule of Changes in the Employers' Net OPEB Liability, the Schedule of OPEB Contributions from Employers, and the Notes to the Schedule of Contributions presented in the Financial Section of this report. Additionally, GRS prepared the Executive Summary, the Schedule of Increases and Decreases of Benefit Recipients, the Total Experience Gain or Loss, the Solvency Test, and the Schedule of Funding Progress presented in the Actuarial Section of this report. Full actuarial valuation reports have also been provided to the System.

All calculations have been made in conformity with generally accepted actuarial principles and practices, and with the Actuarial Standards of Practice issued by the Actuarial Standards Board. In our opinion, the results presented also comply with the requirements of the Oklahoma statutes and, where applicable, the Internal Revenue Code. The undersigned are independent actuaries. They are Members of the American Academy of Actuaries and meet all of the Qualification Standards of the American Academy of Actuaries. Joseph Newton and Bill Detweiler are Enrolled Actuaries. The undersigned are experienced in performing valuations for large public retirement systems.

ACTUARIAL VALUATION

The primary purposes of the actuarial valuation are to determine the adequacy of the current employer contribution rates and the level of dedicated State revenue, to describe the current financial condition of the System, and to analyze changes in the System's condition. In addition, the actuarial valuation produces various summaries of the data.

FINANCING OBJECTIVES

The member, employer, and "grant matching" contribution rates, as well as the dedicated State revenue, are established by law. Members contribute 7.00% of covered compensation.

The contribution rate for employers covered by the Education Employees Service Incentive Plan (EESIP) is 9.50%. For employers not covered by the EESIP—the comprehensive and regional four-year universities—the contribution rate is 8.55%. This employer payroll contribution is projected to average about 9.3% of payroll.

The State of Oklahoma contributes a percentage of its revenues from sales taxes, use taxes, corporate income taxes, individual income taxes, and lottery proceeds to the System. This percentage has been 5.00% since FY 2008. HB 2741 passed during the 2020 legislative session which temporarily reduced the percentage to 3.50% for FY 2021. HB 2894 passed during the 2021 legislative session which restored the percentage to 5.00% for FY 2022 and then changed the percentage to 5.25% for FY 2023 through FY 2027. The percentage is scheduled to return back to 5.00% beginning in FY 2028. Since these contribution sources are unrelated to the covered payroll of the System, our outlook for the future contribution level from these sources incorporates five years of actual contributions to develop a five-year average of 7.8% of payroll when the percentage of State tax revenues is 5.00% and 8.2% of payroll when the percentage of State tax revenues is 5.25%.

Finally, the System receives "grant matching" contributions from employers for positions whose funding comes from federal sources or certain grants. The matching contribution rate for FY 2024 is 8.4% of applicable payroll. These "grant matching" contributions are equivalent to a contribution rate of approximately 0.7% of covered payroll.

On a combined basis, we expect that the contributing entities will contribute 18.2% of covered payroll ($9.3\% + 8.2\% + 0.7\% = 18.2\%$) from FY 2024 through FY 2027, decreasing to 17.8% ($9.3\% + 7.8\% + 0.7\% = 17.8\%$) for all years after.

The dedicated State revenue along with the local and matching contributions, when combined with the contributions made by members, are intended to pay for the normal cost and to amortize the unfunded actuarial accrued liability of the System.



DEFERRED ASSET LOSSES/GAINS

The actuarial value of assets is based upon the fair value, but asset gains and losses – earnings greater or less than the assumed annual investment return – are recognized at a rate of 20% per year for five years.

The fair value of assets returned 7.6% for the fiscal year ending June 30, 2023. The actuarial value of assets returned 6.0% due to the asset smoothing method and thus trailed the assumed rate of 7.00% for FY 2023. The return deficit on an actuarial value of assets basis resulted in an asset loss of \$194 million and a decrease in the System’s funded ratio of about 0.7%.

PROGRESS TOWARD ELIMINATING UAAL

The unfunded actuarial accrued liability (UAAL) decreased to \$7.104 billion, down from \$7.366 billion as of June 30, 2022. Correspondingly, the System’s funded ratio—actuarial value of assets divided by the actuarial accrued liability—increased from 73.5% to 75.1% as of June 30, 2023. The funded ratio was expected to increase based on the current funding policy, but increased slightly more than expected based on actual contributions being higher than expected and salary increases less than expected.

The System is expected to eliminate the current UAAL in 12 years based upon the current contribution and benefit provisions, assuming no actuarial gains or losses in the future, and assuming the actuarial value of assets returns 7.00%.

BENEFIT PROVISIONS

Our actuarial valuation as of June 30, 2023 reflects the benefit and contribution provisions set forth in current statutes. There were no bills enacted during the 2023 State of Oklahoma legislative session impacting the benefits paid by the System that had an actuarial impact upon the System.

A summary of all major plan provisions contained within this valuation is included in the section titled “Summary of Plan Provisions”.

ASSUMPTIONS AND METHODS

Assumptions are set by the Board of Trustees, taking into account the recommendations of the System’s actuary. The System has an experience investigation study performed at least every fifth year. The actuarial assumptions used in this valuation are based upon the 2020 Experience Investigation Study Report, dated July 15, 2020, measuring the experience investigation period FY2015 – FY2019. The current actuarial assumptions were adopted by the Board in July 2020 and first utilized in the June 30, 2020 actuarial valuation report, and there have been no changes since.

The results of the actuarial valuation are dependent upon the actuarial assumptions used. Actual results can and almost certainly will differ, as actual experience deviates from the assumptions. Even seemingly minor changes in the assumptions can materially change the liabilities, calculated contribution rates and funding periods.



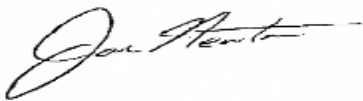
Board of Trustees
November 17, 2023
Page 4

We believe the assumptions are internally consistent and are reasonable, based on the actual experience of the System. Further, we believe the assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice. A summary of the actuarial methods and assumptions incorporated into this valuation is included in the section titled "Summary of Actuarial Assumptions and Methods".

DATA

Member data for retired, active, and inactive participants was supplied as of June 30, 2023 by the System's staff. We have not subjected this data to any auditing procedures, but have examined the data for reasonableness and consistency with the prior year's data. Asset information as of June 30, 2023 was supplied by the auditors and by the System's staff. GRS is not responsible for the accuracy or completeness of the information provided to us.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Joseph Newton, FSA, EA, MAAA
Pension Market Lead and Actuary



Bill Detweiler, ASA, EA, FCA, MAAA
Consultant and Actuary



Cassie Rapoport, ASA, MAAA
Senior Analyst and Actuary



Executive Summary

Item	2023	2022
Membership		
• Number of		
- Active members	100,959	99,844
- Retirees and beneficiaries	69,432	68,330
- Inactive, vested	15,037	14,096
- Inactive, nonvested	14,956	12,896
- Total	200,384	195,166
• Payroll	\$ 5,286 million	\$ 5,152 million
Statutory contribution rates		
	FY 2024	FY 2023
• Employers in EESIP	9.50%	9.50%
• Regional universities	8.55%	8.55%
• Federal/grant salaries	8.40%	8.00%
• Members	7.00%	7.00%
• State (% of tax revenues)	5.25%	5.25%
Assets		
• Fair value	\$ 20,854 million	\$ 19,669 million
• Actuarial value	\$ 21,405 million	\$ 20,469 million
• Return on fair value	7.6%	-9.5%
• Return on actuarial value	6.0%	7.5%
• State/local/federal contributions	\$ 1,027 million	\$ 967 million
• External cash flow %	-1.4%	-1.6%
• Ratio of actuarial to fair value	102.6%	104.1%
Actuarial Information on Actuarial Value		
• Normal cost %	10.46%	10.51%
• Unfunded actuarial accrued liability (UAAL)	\$ 7,104 million	\$ 7,366 million
• Funded ratio	75.1%	73.5%
• Funding period (years)	12	14
Actuarial Information on Fair Value		
• Unfunded actuarial accrued liability (UAAL)	\$ 7,656 million	\$ 8,166 million
• Funded ratio	73.1%	70.7%
• Funding period (years)	13	16
Gains/(losses)		
• Asset experience	(\$194) million	\$ 101 million
• Liability experience	106 million	(62) million
• Legislative Changes	0 million	0 million
• Assumption Changes	0 million	0 million
• Total	(\$88) million	\$ 39 million

Schedule of Active Member Valuation Data - DB Plan Periods Ended June 30

<u>Valuation Date</u>	Active Member <u>Total</u>	Medicare- <u>Eligible</u>	Non-Medicare <u>Eligible</u>	<u>Annual Payroll</u>	Annual <u>Average Pay</u>	% Increase in <u>Average Pay</u>
2014	89,570	*	*	\$4,002,883,716	\$44,690	1.51%
2015	90,388	*	*	\$4,231,846,057	\$46,819	4.76%
2016	90,167	3,514	86,653	\$4,254,783,265	\$47,188	0.79%
2017	87,795	3,587	84,208	\$4,115,686,767	\$46,878	-0.66%
2018	88,534	3,752	84,782	\$4,223,226,379	\$47,702	1.76%
2019	90,014	4,033	85,981	\$4,591,955,376	\$51,014	6.94%
2020	91,471	4,235	87,236	\$4,801,299,110	\$52,490	2.89%
2021	89,945	4,082	85,863	\$4,793,220,825	\$53,291	1.53%
2022	99,844	4,557	95,287	\$5,152,457,100	\$51,605	-3.16%
2023	100,959	4,673	96,286	\$5,286,456,000	\$52,362	1.47%

* Information for these years is not readily available

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, 2023. 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:

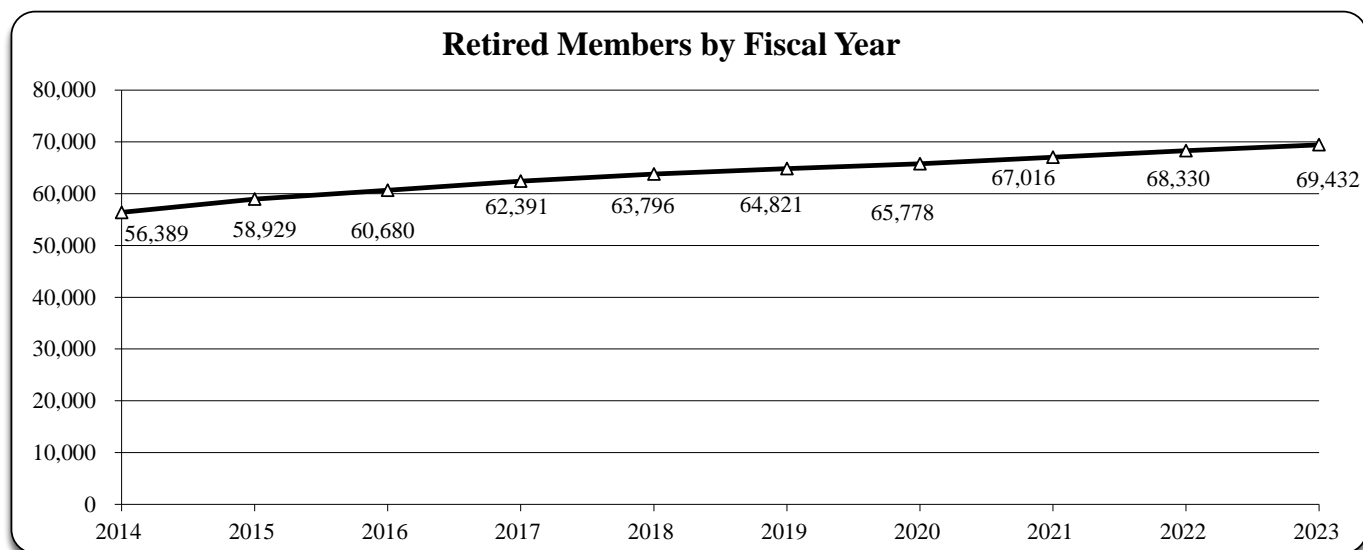
1% Decrease 6.00%	Current Single Rate Assumption 7.00%	1% Increase 8.00%
\$11,130,817,250	\$7,706,474,888	\$4,871,638,760

Schedule of Increases and Decreases of Benefit Recipients - DB Plan Periods Ended June 30

Year Ended	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls-End of Year</u>		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances* **	No.	Annual Allowances	No.	Annual Allowances**		
2014	3,208	74,367,565	1,400	22,188,183	56,389	1,094,495,298	5.0%	19,410
2015	4,053	96,652,350	1,513	24,486,087	58,929	1,166,661,561	6.6%	19,798
2016	3,420	83,343,346	1,669	27,476,789	60,680	1,222,528,118	4.8%	20,147
2017	3,323	79,639,291	1,612	26,725,994	62,391	1,275,441,415	4.3%	20,443
2018	3,155	74,318,025	1,750	29,816,313	63,796	1,319,943,127	3.5%	20,690
2019	2,816	66,700,469	1,791	30,295,490	64,821	1,356,348,106	2.8%	20,925
2020	2,877	115,139,960	1,920	31,861,412	65,778	1,439,626,654	6.1%	21,886
2021	3,606	96,892,428	2,368	39,297,593	67,016	1,497,221,489	4.0%	22,341
2022	3,557	92,173,853	2,243	40,145,154	68,330	1,549,250,188	3.5%	22,673
2023	3,288	87,853,542	2,186	40,971,568	69,432	1,596,132,162	3.0%	22,988

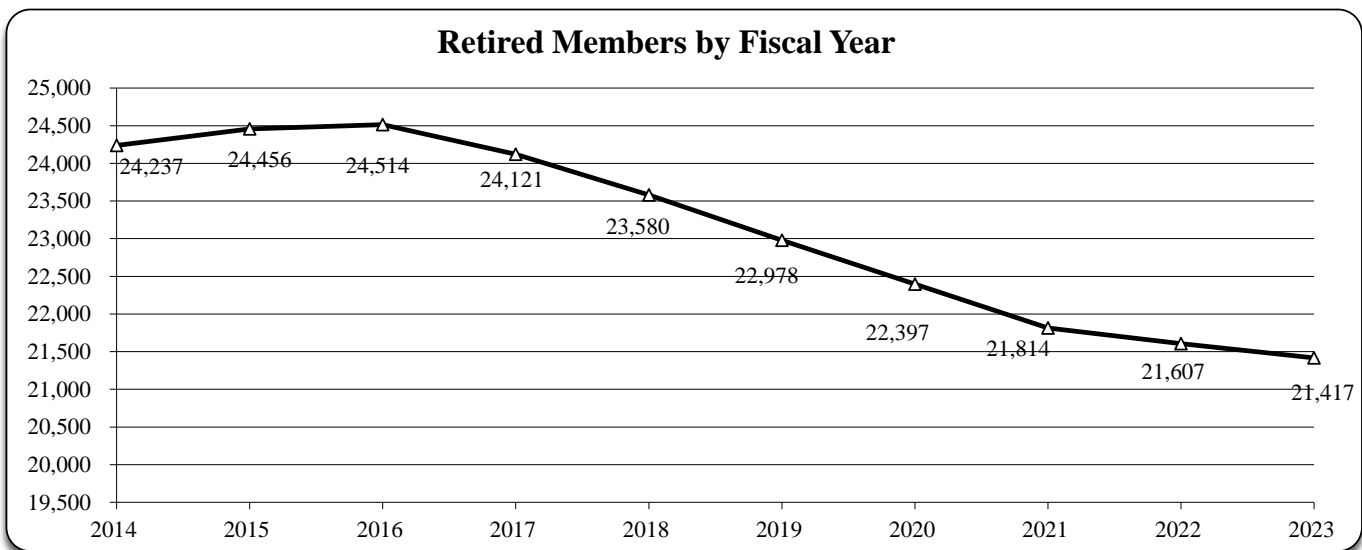
* Includes post-retirement increases for members who retired in previous years and changes occurring due to plan options which offer a continuing monthly benefit payment to beneficiaries.

** Includes the impact of HB3350 which granted a cost of living adjustment for certain retirees.



Schedule of Increases and Decreases of Benefit Recipients - OPEB Plan Periods Ended June 30

Year Ended	<u>Added to Rolls</u>		<u>Removed from Rolls</u>		<u>Rolls-End of Year</u>		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances		
2013	1,219	1,490,688	1,147	1,415,316	23,917	29,422,656	0.3%	1,230
2014	1,552	1,898,400	1,232	1,518,768	24,237	29,802,288	1.3%	1,230
2015	1,455	1,779,552	1,236	1,523,136	24,456	30,058,704	0.9%	1,229
2016	1,372	1,677,840	1,314	1,617,780	24,514	30,118,764	0.2%	1,229
2017	1,270	1,552,956	1,663	2,043,984	24,121	29,627,736	-1.6%	1,228
2018	1,040	1,271,772	1,581	1,944,120	23,580	28,955,388	-2.3%	1,228
2019	905	1,107,012	1,507	1,852,536	22,978	28,209,864	-2.6%	1,228
2020	798	975,864	1,379	1,695,972	22,397	27,489,756	-2.6%	1,227
2021	1,004	1,227,648	1,587	1,951,200	21,814	26,766,204	-2.6%	1,227
2022	1,190	1,455,264	1,397	1,716,804	21,607	26,504,664	-1.0%	1,227
2023	1,230	1,503,480	1,420	1,744,272	21,417	26,263,872	-0.9%	1,226



Investment Experience Gain or Loss

Item (1)	Year Ending June 30, 2023 (2)	Year Ending June 30, 2022 (3)
1. Actuarial assets, beginning of year	\$ 20,469,231,290	\$ 19,330,293,468
2. Contributions during year	\$ 1,398,224,286	\$ 1,333,476,057
3. Benefits and refunds paid	\$ (1,684,417,544)	\$ (1,632,637,112)
4. Administrative expenses	\$ (6,818,605)	\$ (5,837,976)
5. Assumed net investment income at 7.0%:		
a. Beginning of year assets	\$ 1,432,846,190	\$ 1,353,120,543
b. Contributions	48,937,850	46,671,662
c. Benefits and refunds paid	(58,954,614)	(57,142,299)
d. Administrative expenses	(238,651)	(204,329)
e. Total	\$ 1,422,590,775	\$ 1,342,445,577
6. Expected actuarial assets, end of year (Sum of Items 1 through 5)	\$ 21,598,810,202	\$ 20,367,740,014
7. Actual actuarial assets, end of year	\$ 21,405,284,195	\$ 20,469,231,290
8. Asset gain (loss) for year (Item 7 - Item 6)	\$ (193,526,007)	\$ 101,491,276

Solvency Test

The System's funding objective is to meet long term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due – the ultimate test of financial soundness.

A short-term solvency test is one way of evaluating a system's progress under its funding program. In a short-term solvency test, the plan's present assets are compared with:

1. Active member contributions on deposit;
2. The liabilities for future benefits to present retirees;
3. The liabilities for terminated employees with vested benefits; and
4. The liabilities for service already rendered by active members.

In a system that has been following the level contribution rate of payroll financing principle, the liabilities for active member contributions on deposit (liability 1), the liabilities for future benefits to present retirees (liability 2), and the liabilities for terminated employees with vested benefits (liability 3) will be fully covered by present assets except in rare circumstances. In addition, the liabilities for service already rendered by active members (liability 4) will be partially covered by the remainder of present assets. Generally, if the System has been using level contribution rate financing, the funded portion of liability 4 will increase over time. Following is a summary of the solvency test:

Solvency Test

Actuarial Accrued Liability and Percent of Active Member Payroll for:

June 30,	Accumulated Member Contributions Including Interest		Retirees and Beneficiaries Currently Receiving Benefits		Terminated Employees Not Yet Receiving Benefits		Employer Financed Portion of Vested and Nonvested Benefits		Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Assets			
	(1)	% of Payroll	(2)	% of Payroll	(3)	% of Payroll	(4)	% of Payroll		(1)	(2)	(3)	(4)
2014	\$ 5,221.1	130%	\$ 10,780.2	269%	\$ 726.8	18%	\$ 2,847.5	71%	\$ 12,369.0	100%	66%	0%	0%
2015	5,377.9	127%	11,499.9	272%	534.3	13%	3,280.5	78%	13,771.9	100%	73%	0%	0%
2016	5,494.8	129%	12,466.8	293%	610.9	14%	3,620.7	85%	14,577.9	100%	73%	0%	0%
2017	5,572.8	135%	12,602.9	306%	651.1	16%	3,227.3	78%	15,516.3	100%	79%	0%	0%
2018	5,736.4	136%	12,973.2	307%	696.5	16%	3,209.8	76%	16,486.9	100%	83%	0%	0%
2019	6,011.2	131%	13,205.7	288%	750.2	16%	3,713.1	81%	17,150.3	100%	84%	0%	0%
2020	6,315.8	132%	14,409.8	300%	858.9	18%	4,825.4	101%	17,769.3	100%	79%	0%	0%
2021	6,340.3	132%	14,941.6	312%	920.1	19%	4,831.5	101%	19,330.3	100%	87%	0%	0%
2022	6,464.3	125%	15,376.9	298%	975.6	19%	5,018.2	97%	20,469.2	100%	91%	0%	0%
2023	6,593.5	125%	15,729.1	298%	1,070.5	20%	5,116.6	97%	21,405.3	100%	94%	0%	0%

Note: Dollar amounts in millions

Schedule of Funding Progress

Valuation As of June 30, (1)	Actuarial Value of Assets (in Millions) (2)	Actuarial Accrued Liability (AAL) (in Millions) (3)	Unfunded AAL (UAAL) (3) - (2) (in Millions) (4)	Funding Ratio Assets as % of AAL (2) / (3) (5)	Annual Covered Payroll (in Millions) (6)	UAAL as a % of Annual Covered Payroll (4) / (6) (7)
2014	\$ 12,369.0	\$ 19,575.6	\$ 7,206.6	63.2%	\$ 4,002.9	180.0%
2015	13,771.9	20,692.6	6,920.7	66.6%	4,231.8	163.5%
2016	14,577.9	22,193.4	7,615.6	65.7%	4,254.8	179.0%
2017	15,516.3	22,054.1	6,537.8	70.4%	4,115.7	158.9%
2018	16,486.9	22,615.9	6,129.0	72.9%	4,223.2	145.1%
2019	17,150.3	23,680.2	6,529.9	72.4%	4,591.9	142.2%
2020	17,769.3	26,409.9	8,640.6	67.3%	4,801.3	180.0%
2021	19,330.3	27,033.5	7,703.2	71.5%	4,793.2	160.7%
2022	20,469.2	27,835.0	7,365.8	73.5%	5,152.5	143.0%
2023	21,405.3	28,509.7	7,104.5	75.1%	5,286.5	134.4%

Summary of Plan Provisions

1. Effective Date: July 1, 1943.
2. Plan Year: Twelve-month period ending June 30th.
3. Administration: The Teachers' Retirement System of Oklahoma is administered by a Board of Trustees, which is responsible for administration of the System and investment of System assets. Four members serve ex officio, while a total of ten others are appointed by the Governor (six), the President of the Senate (two), and the Speaker of the House (two), according to various guidelines. Additionally, a statewide organization representing retired educators shall appoint a member to the Board who shall be a nonvoting member.
4. Type of Plan: The System is a qualified governmental defined benefit retirement plan. For GASB purposes, it is a cost-sharing multiple-employer plan.
5. Eligibility: Employees of any public school in Oklahoma, including public colleges and universities, are eligible to participate in the System. Classified personnel (teachers, supervisors, principals, registered school nurses, administrators, etc.) are required to participate, beginning at their date of employment. Non-classified employees (all other employees, such as drivers, secretaries, janitors, cooks, etc.) working 20 hours or more per week may, but are not required to, participate. Effective July 1, 2021, all eligible non-classified employees must make an irrevocable election whether or not to become a participant in TRS within 30 days of their initial date of employment. Certain other State employees, such as employees of the System itself, participate in the System. Beginning July 1, 2004, new employees hired by the comprehensive universities (Oklahoma University, the Health Sciences Center, and Oklahoma State University) may elect to join an alternate plan provided by the universities in lieu of joining TRS. The election to join the alternate plan is irrevocable.
6. Maximum Pay: Prior to July 1, 1995, contributions under this System were based on pay up to a maximum dollar amount. Members could choose between a \$40,000 maximum and a \$25,000 maximum. The member's Final Average Compensation was limited by this same maximum, so the member's election affected both benefits and contributions.

The maximum was removed for most members effective July 1, 1995. It no longer applies in determining the required member and employer contributions. It does still have an impact, however. As noted below, benefits based on service earned before July 1, 1995 are limited by the \$40,000 or \$25,000 maximum, whichever was elected. This cap may be modified for members in the Education Employees Service Incentive Plan (EESIP). See Item 22 below discussing the EESIP provisions.

In addition, the cap on salary continued to apply after June 30, 1995 to members employed by one of the comprehensive universities who entered the System before July 1, 1995. The cap on salary for contribution purposes is shown in the schedule below. All caps were removed effective July 1, 2007.

	Elected <u>\$40,000 Maximum</u>	Elected <u>\$25,000 Maximum</u>
1995/1996	\$44,000	\$27,500
1996/1997	49,000	32,500
1997/1998	54,000	37,500
1998/1999	59,000	42,500
1999/2000	59,000	42,500
2000/2001	64,000	47,500
2001/2002	69,000	52,500
2002/2003	74,000	57,500
2003/2004	79,000	62,500
2004/2005	84,000	67,500
2005/2006	89,000	72,500
2006/2007	94,000	77,500
Thereafter	No limit	No limit

Benefits for the members employed by the comprehensive universities, except for those hired on or after July 1, 1995, are limited by the pay caps for the period before July 1, 2007.

7. Member Contributions: Generally, active members contribute 7.00% of all compensation to the System. A school district may pay all or part of the contribution for its employees.
8. Employer Contributions: Employers are required to contribute a fixed percentage of pay on behalf of active members. The employer contribution rate is now applied to all pay, although historically the rate was not applied to pay above the cap on salary.

The employer contribution rate for years from July 1, 2002 through December 31, 2006 was 7.05% of covered salary. Effective January 1, 2007, the employer contribution rate paid by all employers covered by the EESIP increased to 7.60%. This rate then increased to 7.85% effective July 1, 2007, 8.35% effective January 1, 2008, 8.50% effective July 1, 2008, 9.00% effective January 1, 2009, and 9.50% effective January 1, 2010. For employers not covered by the EESIP—the comprehensive and regional four-year universities—the rate increased to 7.55% effective January 1, 2008, 8.05% effective January 1, 2009, and 8.55% effective January 1, 2010.

In addition, the State of Oklahoma contributes 5.00% percent of revenues from sales taxes, use taxes, corporate income taxes and individual income taxes. The 5.00% rate became effective on July 1, 2007. The rates are shown in the following schedule on the next page.

<u>Fiscal Year</u>	<u>State Contribution Percentage</u>
FY 2003	3.54%
FY 2004	3.54%
FY 2005	3.75%
FY 2006	4.00%
FY 2007	4.50%
FY 2008	5.00%
Thereafter	5.00%*

Beginning in FY 2006, the State also contributes 5.00% of lottery proceeds.

* HB 2741 passed during the 2020 legislative session which temporarily changed the percentage to 3.50% for FY 2021, 3.75% for FY 2022, and 5.50% for FY 2023 through FY 2027. HB 2894 passed during the 2021 legislative session which restored the percentage to 5.00% for FY 2022 and modified the percentage to 5.25% for FY 2023 through FY 2027. The percentage is scheduled to return back to 5.00% beginning in FY 2028. Additionally, HB 4388 passed during the 2022 legislative session which limits the amount of lottery proceeds received by TRS. TRS will now only receive a portion of funds on the first \$65 million deposited in the Oklahoma Education Lottery Trust Fund.

If a member's salary is paid from federal funds or certain grant money, an additional contribution (the grant matching contribution) is required. The matching contribution rate is set by the Board of Trustees annually and is expressed as a percentage of federal/grant salaries.

<u>Fiscal Year</u>	<u>Federal/Grant Contribution Percentage</u>
FY 2004 to 2005	4.50%
FY 2006	5.00%
FY 2007 to 2008	7.00%
FY 2009 to 2010	7.50%
FY 2011	6.50%
FY 2012	7.00%
FY 2013	8.00%
FY 2014 to 2016	8.25%
FY 2017	7.70%
FY 2018	7.80%
FY 2019 to 2021	7.70%
FY 2022	7.90%
FY 2023	8.00%
FY 2024	8.40%

Beginning August 25, 2021, the matching contribution rate for summer programs will be limited to one half of the regular matching rate.

The Initial Funding Surcharge, which was an additional contribution made by the comprehensive universities equal to 2.50% of the payroll for those employees who elect to join the Alternate Retirement Plan in lieu of joining the System, ended with FY 2019 when the unfunded actuarial accrued liability of the participating institutions was reduced to zero.

9. Service: Employees receive credit for a year of service if they are contributing members for at least six months within one school year. For service performed on or after July 1, 2013, fractional service will be awarded for less than full-time employment performed during the contract year. Fractional service credit will be added together and the resulting sum will be included in the retirement formula calculations. For service performed on or after July 1, 2016 service credit awarded for all members will be the result of the days the employee worked during the employment year divided by the days the full-time equivalent for that position would be required to work during the entire employment year.

Credit may also be granted for service prior to the System's effective date, and non-classified employees can purchase credit for their prior service once they have joined the System. Credit is also available for some out-of-state and military service under certain circumstances.

Finally, members receive a year of service credit if they have accumulated 120 days of unused sick leave at termination. As of August 1, 2012, if a member has less than 120 days of unused sick leave at termination, additional service credit for sick leave days shall be equal to the number of unused sick leave days divided by 120 days.

10. Final Average Compensation (FAC): The average of the member's compensation for the three or five years on which the highest contributions are paid. For persons becoming members before July 1, 1992, the averaging period is three years. For other members, the averaging period is five years. For service prior to July 1, 1995, the FAC is limited to \$40,000 or \$25,000, depending on the member's election and participation in the EESIP as discussed in Item 6 above and in Item 22.

11. Normal Retirement

- a. Eligibility: A member is eligible to retire and receive a Normal Retirement benefit if (i) the member is at least age 62 and has credit for five or more years of service, or (ii) the sum of the member's age and service is at least 80 (Rule of 80). For members joining after June 30, 1992, a "Rule of 90" is used instead of the "Rule of 80". Members joining after October 31, 2011 are eligible if (i) the member is at least age 65 and has credit for five or more years of service, or (ii) the member is at least age 60 and meets the "Rule of 90". Members joining after October 31, 2017 must have credit for seven or more years of service.
- b. Monthly Benefit: 2% of FAC (limited to \$40,000 or \$25,000, as appropriate) times years of service prior to July 1, 1995, plus 2% of FAC (unlimited) times years of service after June 30, 1995. Special provisions apply to members covered by the EESIP (see Item 22 below). Other special provisions apply to higher education members for service during the period July 1, 1995 through June 30, 2007 if their pay in any year in this period exceeded the applicable maximum. Monthly benefits are equal to one-twelfth of the calculated amount.
- c. Payment Form: Benefits are paid as a monthly life annuity, with a guarantee that if the payments made do not exceed the member's accumulated contributions, determined as of the date of retirement, the balance will be paid in a lump-sum to the member's beneficiary. This payment form is referred to as the "Maximum Option" since it initially provides the largest annuity. Optional forms of payment are available; see below.

12. Early Retirement

- a. Eligibility: A member is eligible to retire early if the member is at least age 55 and has credit for five or more years of service, or at any age after 30 years of service. For members joining after October 31, 2011, a member is eligible to retire early if the member is at least age 60 and has credit for five or more years of service. Members joining after October 31, 2017 must have credit for seven or more years of service.
- b. Monthly Benefit: The Normal Retirement benefit (based on current years of service) multiplied by the applicable early retirement factor below.
- c. Early Retirement Factor:

Retirement Age	Actuarial Equivalent Factors for Members Joining before November 1, 2011*	Statutory Factors for Members Joining after October 31, 2011
65 or later	1.000000	1.00
64	1.000000	0.93
63	1.000000	0.86
62	1.000000	0.80
61	0.913529	0.73
60	0.835549	0.65
59	0.765083	N/A
58	0.701285	N/A
57	0.643419	N/A
56	0.590845	N/A
55	0.543003	N/A
54	0.499406	N/A
53	0.459624	N/A
52	0.423278	N/A
51	0.390033	N/A
50	0.359593	N/A

* Reduction factors will change as the System's definition of Actuarial Equivalence changes. Factors stated here were communicated to the System in 2018.

- d. Payment Form: Same as for Normal Retirement above.

13. Disability Retirement

- a. Eligibility: A member is eligible provided (i) he/she has credit for at least 10 years of service and (ii) the disability is either approved by the Medical Board appointed by the Board of Trustees, or the member is determined to be eligible for disability benefits pursuant to the Social Security System.

- b. Monthly Benefit: Same as for Normal Retirement above (based on current service).
- c. Payment Form: The disability benefit commences immediately upon the member's retirement. Benefits are reduced or cease entirely upon recovery or reemployment prior to age 60. Disability benefits are payable as a monthly life annuity, with a guarantee that if the payments made do not exceed the sum of the member's accumulated contributions as of the date of retirement, the balance will be paid in a lump-sum to the member's beneficiary. A married, disabled member may elect a reduced benefit under the Joint & 100% Survivor option (with pop up) form of payments (Option 2 described in Item 17 below).

14. Vested Termination Benefit

- a. Eligibility: A member with at least 5 years of service who does not withdraw his/her contributions from the fund is eligible for a vested termination benefit. Members joining after October 31, 2017 must have credit for 7 or more years of service.
- b. Monthly Benefit: Same as for Normal Retirement above (based on current service). If benefits commence prior to age 62 (age 65 for members joining after October 31, 2011), they may be reduced for Early Retirement above.
- c. Payment Form: Same as for Normal Retirement above.

15. Withdrawal (Refund) Benefit

- a. Eligibility: All members leaving covered employment with less than 5 years of service (7 years for members joining after October 31, 2017) for a reason other than the member's death. Optionally, members eligible for other benefits may withdraw their contributions in lieu of the regular benefits due.
- b. Benefit: The member who withdraws receives a lump-sum payment of his/her employee contributions, plus a portion of the interest credited by the System on these contributions. Interest is credited at a rate equivalent to that of the actuarially assumed rate of return for the System. The portion of the interest paid on termination depends on the member's years of service as follows:

Years of Service	Percent of Interest Refunded
0-15	50%
16-21	60%
22-25	75%
26 or more	90%

16. Death in Service

- a. Eligibility: Death must have occurred while an active member.
- b. Benefit: Upon the death of an active member, a refund of the member's contributions and 100% of the interest credited is paid. In addition, a lump sum of \$18,000 will be paid. If the member is eligible for retirement (early or normal) at the time of death, and the member has named a sole beneficiary who meets the requirements of a joint annuitant under retirement Option 2, the beneficiary may elect to receive a monthly life annuity equal to the retirement benefit for which the member was eligible, reduced as though the member had elected to receive benefits under Option 2 (see below). This annuity is paid in lieu of both
 - (i) the \$18,000 lump-sum death benefit and (ii) the refund of contributions.

The spouse of an EESIP eligible member can elect to receive the enhanced benefit described under Item 22 below.

17. Optional Forms of Payment: In addition to the "Maximum Option" described under Normal Retirement, above, there are optional forms of payment available on an actuarially equivalent basis, as follows:

- a. Option 1 - A modified cash refund annuity payable for life with a guaranteed refund of the member's contributions and interest, less the total of the "annuity" payments paid. (The "annuity" payment is the portion of the monthly benefit provided by the member's own account balance.)
- b. Option 2 - A joint life annuity payable while both the member and the joint annuitant are alive; and if the member dies before the joint annuitant, continuing without change to the joint annuitant; or if the joint annuitant dies before the member, "popping-up" to the original life annuity amount and continuing for the life of the member.
- c. Option 3 - A joint life annuity payable while both the member and the joint annuitant are alive; and if the member dies before the joint annuitant, continuing at 50% of this amount for the joint annuitant's lifetime; or if the joint annuitant dies before the member, "popping-up" to the original life annuity amount and continuing for the life of the member.
- d. Option 4 - A life annuity with a guarantee that if the member dies before 120 payments (10 years) have been made; the payments will be continued to the member's beneficiary for the balance of the ten-year period.
- e. PLSO Option - A partial lump-sum option (PLSO) is allowed for those members with at least 30 years of service upon retirement. The amount of the PLSO is equal to 12, 24, or 36 times the member's monthly retirement benefit, determined before applying any reduction for the PLSO or any other optional form of payment. A member who elects to receive a PLSO will have his/her monthly retirement benefit reduced on an actuarial basis to compensate for the fact that a PLSO is provided. A member who elects a PLSO may elect any of the other optional forms of payment as well, taking a further reduction in the annuity amount.

Actuarial equivalence is based on tables adopted by the Board of Trustees.

18. Special Retirees: This was a group of retirees who had been granted a special \$150 per month benefit although they did not fulfill the requirements for service retirement. There are currently no Special Retirees receiving benefits.
19. Supplemental Medical Insurance
- a. Eligibility: All retired members (including service retirees and disabled retirees but excluding the special retirees and spouses or beneficiaries) who have at least 10 years of service credit are eligible for a supplemental medical insurance payment.
 - b. Monthly Benefit: Eligible members receive the smaller of (i) a Medicare supplement benefit, if eligible, or (ii) an amount between \$100 and \$105 per month, depending on service and Final Average Compensation.
 - c. Payment Form: Benefits are payable as a life annuity on behalf of the retired member to (i) the Oklahoma Employees' Group Insurance Plan, if the member has health coverage under this Plan, or (ii) to the member's former employer, if the member retains health coverage under a plan maintained by the former employer.
20. Post-retirement Death Benefit
- a. Eligibility: All retired members (including service retirees and disabled retirees but excluding the special retirees and spouses or beneficiaries) are eligible for a post-retirement death benefit.
 - b. Benefit: A lump-sum payment of \$5,000.
21. Vested Termination Death Benefit
- a. Eligibility: A member with at least 5 years of service who does not withdraw his/her contributions from the fund is eligible for a vested termination death benefit. Members joining after October 31, 2017 must have credit for 7 or more years of service.
 - b. Benefit: Members' account balance of contributions and applicable interest.
22. Cost-of-living Increase: From time to time, the System has been amended to grant certain post-retirement benefit increases. However, the System has no automatic cost-of-living increase features.

23. EESIP: The Education Employees Service Incentive Plan (EESIP) was created in 2006. Active members are eligible for the EESIP if they have service prior to July 1, 1995, are active on or after July 1, 2006, and are not employed by one of the comprehensive or regional four-year universities.

The EESIP allows for two years of service prior to July 1, 1995 to be computed at an enhanced or eliminated cap for each year that the employee has worked beyond Normal Retirement Age at the time of retirement.

For each “uncapped” year, the \$40,000 cap applicable to service before July 1, 1995 is increased to \$60,000 for retirements in FY 2007, to \$80,000 for retirements in FY 2008, and the cap is removed beginning July 1, 2008. The employee that elects the enhanced benefit must pay the accumulations, at 10% interest, of contributions that would have been required but for the cap then in place. Payment is required only for years FY 1988 through FY 1995 even if more than 8 years of service prior to July 1, 1995 are being “uncapped.” Payment is required only for those years of service that are computed at an elevated or eliminated cap.

Contributions are required at the following rates for salary in excess of the \$25,000 or \$40,000 cap earned in years FY 1988 through FY 1995:

Fiscal Year	Contribution Percentage
FY 1995	8.00%
FY 1994	9.00%
FY 1993	11.00%
FY 1992	11.00%
FY 1991	11.00%
FY 1990	10.50%
FY 1989	10.00%
FY 1988	10.00%

For those members electing the enhanced benefit, the payment required is 50% of the accumulated balance in FY 2007, 75% of the accumulated balance in FY 2008 and 100% of the accumulated balance on or after FY 2009.

Summary of Actuarial Assumptions and Methods

The actuarial assumptions and methods used in this valuation are based upon the 2020 Experience Investigation Study Report, dated July 15, 2020, measuring the experience investigation period FY2015 – FY2019. The current actuarial assumptions were adopted by the Board in July 2020 and first utilized in the June 30, 2020 actuarial valuation report and correspond with the recommendations of the actuary.

I. Valuation Date

The valuation date is June 30th of each plan year. This is the date as of which the actuarial present value of future benefits and the actuarial value of assets are determined.

II. Actuarial Cost Method

Because the employer contribution rate is set by statute, the actuarial valuation is used to determine the number of years required to amortize the Unfunded Actuarial Accrued Liability (UAAL), or the funding period.

The Individual Entry Age Normal actuarial cost method assigns the plan's total unfunded liabilities (the actuarial present value of future benefits less the actuarial value of assets) to various periods. The unfunded actuarial accrued liability is assigned to years prior to the valuation, and the normal cost is assigned to the year following the valuation. The remaining costs are the normal costs that will be recognized in future years. The resulting actuarially determined contribution requirement is intended to pay for the normal cost and to amortize the unfunded actuarial accrued liability of the System.

The normal cost contribution rate is determined using the Individual Entry Age Normal method. Under this method, a calculation is made to determine the rate of contribution which, if applied to the compensation of each individual member during the entire period of anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. The salary-weighted average of these rates is the normal cost rate. This calculation reflects the plan provisions that apply to each individual member. The employer normal cost rate is equal to (i) the normal cost rate, plus (ii) the expected administrative expenses, minus (iii) the member contribution rate.

The actuarial accrued liability is the difference between the total present value of future benefits and the actuarial present value of future normal costs. The unfunded actuarial accrued liability is the excess of the actuarial accrued liability over the actuarial value of assets.

The funding period is calculated as the number of years required to fully amortize the UAAL, assuming that: (a) future market earnings, net of investment-related expenses, will equal 7.00% per year, (b) there will be no liability gains/losses or changes in assumptions, (c) the active members who leave employment will be replaced by new entrants each year, and (d) employer contributions and dedicated State revenue will remain the same percentage of payroll as projected for the current fiscal year.

The Entry Age actuarial cost method is an “immediate gain” method (i.e., experience gains and losses are separately identified as part of the UAAL). However, they are amortized over the same period applied to all other components of the UAAL.

III. Actuarial Value of Assets

The actuarial value of assets is equal to the fair value, adjusted for a five-year phase in of actual investment return in excess of expected investment return. The actual return is calculated net of investment-related expenses, and the expected investment return is equal to the assumed investment return rate multiplied by the prior year’s fair value of assets, adjusted for contributions, administrative expenses, benefits paid, and refunds.

Prior to the June 30, 2015, the actual and expected returns on plan assets were also determined net of administrative expenses.

IV. Actuarial Assumptions

A. Economic Assumptions

1. Investment return: 7.00% per year, net of investment-related expenses (composed of an assumed 2.25% inflation rate and a 4.75% real rate of return)
2. Administrative expenses: 0.10% of valuation payroll per year
3. Salary increase rate: Inflation rate of 2.25% plus productivity increase rate of 0.75% plus step-rate/promotional as shown

<u>Years of Service</u>	<u>Service-Related Component</u>	<u>Total Salary Increase Rate</u>
(1)	(2)	(3)
0	8.00%	11.00%
1-2	1.50%	4.50%
3-4	1.25%	4.25%
5-11	1.00%	4.00%
12-17	0.75%	3.75%
18-21	0.50%	3.50%
22-24	0.25%	3.25%
25 or more	0.00%	3.00%

4. New entrant salary growth: 3.00% per year
5. Future ad hoc cost-of-living increases: None.

B. Demographic Assumptions

1. Mortality rates - after retirement or termination.

- a. Healthy males – 2020 GRS Southwest Region Teacher Mortality Table. Generational mortality improvements in accordance with the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables projected from the year 2020.
- b. Healthy females – 2020 GRS Southwest Region Teacher Mortality Table. Generational mortality improvements in accordance with the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables projected from the year 2020.

Sample healthy retiree mortality rates, including associated annuity value and life expectancy results:

Sample Attained Ages in 2023	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)		Mortality Rates *	
	Males	Females	Males	Females	Males	Females
40	166.1	168.5	46.4	49.5	0.000603	0.000379
45	161.8	165.1	41.1	44.2	0.000933	0.000631
50	156.0	160.4	35.9	39.0	0.001618	0.001059
55	148.6	154.2	30.8	33.8	0.003023	0.001804
60	139.0	145.9	25.9	28.8	0.004556	0.002613
65	126.8	134.9	21.2	23.9	0.007795	0.004631
70	112.0	121.2	16.8	19.2	0.014062	0.008786
75	95.0	104.7	12.8	14.8	0.025367	0.016663
80	76.7	86.2	9.3	10.9	0.045759	0.031609
85	58.3	66.6	6.4	7.6	0.082545	0.059960

* Mortality rates with generational improvements for year 2023

- c. Disabled males – 2020 GRS Southwest Region Teacher Mortality Table, set forward three years with minimum rates at all ages of 4.0%. Generational mortality improvements in accordance with the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables projected from the year 2020.
 - d. Disabled females – 2020 GRS Southwest Region Teacher Mortality Table, set forward three years with minimum rates at all ages of 2.5%. Generational mortality improvements in accordance with the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables projected from the year 2020.
2. Mortality rates for active members – Pub-2010 Teachers Active Employee Mortality table. Generational mortality improvements in accordance with the ultimate mortality improvement rates from the MP-2014 through MP-2019 tables projected from the year 2010.

3. Disability Incidence –As shown below for selected ages (rates are only applied to eligible members, which are members with at least 10 years of service)

Age	Occurrence of Disability per 100 Members	
	Males	Females
25	0.020	0.018
30	0.020	0.018
35	0.028	0.036
40	0.053	0.090
45	0.081	0.144
50	0.243	0.216
55	0.365	0.333
60	0.142	0.234
65	0.000	0.000

4. Retirement rates - Separate male and female rates, based on age, developed from the 2020 Experience Study. Sample rates are shown below:

Age	Expected Retirements per 100 Lives			
	Unreduced Retirement		Reduced Retirement	
	Males	Females	Males	Females
Under 50	0.00	0.00	0.00	0.00
50-54	12.00	12.00	1.00	1.25
55	12.00	12.00	1.00	1.25
56	12.00	14.00	1.25	1.50
57	12.00	14.00	1.50	1.50
58	12.00	14.00	1.75	1.75
59	12.00	14.00	2.00	2.50
60	12.00	16.00	2.75	4.50
61	16.00	20.00	3.50	5.00
62	25.00	25.00	10.00	10.00
63	18.00	20.00	7.50	7.50
64	18.00	20.00	7.50	7.50
65-74	25.00	30.00		
75 and over	100.00	100.00		

The retirement assumption was further modified for members hired after June 30, 1992. The probability of retirement upon first eligibility for Rule of 90 reflects the accumulated probability of retirement between Rule of 80 and Rule of 90, as applicable.

5. Termination Rates – Rates based on the member’s service, developed from the 2020 Experience Study, and separate rates are used in the development of the present value of benefits (PVB) and the normal cost (NC) calculation. Rates reflect terminations for causes other than death, disability or retirement. Sample rates are shown below:

Expected Terminations Per 100 Lives				
Credited Service (Years)	Short-Term Expectation (PVFB)		Long Term Expectation (NC, New Entrant)	
	Males	Females	Males	Females
0	11.00	12.00	35.00	35.00
1	10.50	11.50	16.00	16.00
2	10.00	11.00	14.00	14.00
3	8.00	8.50	12.00	12.00
4	7.50	8.00	10.00	10.00
5	7.00	7.50	9.00	9.00
6	6.00	7.00	8.00	8.00
7	5.50	6.00	7.50	7.50
8	5.00	5.50	7.00	7.00
9	4.75	5.00	6.50	6.50
10	4.50	4.75	6.00	6.00
11	4.00	4.50	5.50	5.50
12	3.75	4.00	5.00	5.00
13	3.50	3.75	4.50	4.50
14	3.25	3.50	4.00	4.00
15	3.25	3.25	3.75	3.75
16	3.25	3.00	3.50	3.50
17	3.25	3.00	3.50	3.50
18	2.50	2.75	3.00	3.00
19	2.50	2.50	3.00	3.00
20	2.50	2.25	2.50	2.50
21	2.50	2.00	2.50	2.50
22	2.00	2.00	2.50	2.50
23	2.00	2.00	2.50	2.50
24	2.00	2.00	1.50	1.50
25 or more	2.00	2.00	1.50	1.50

C. Other Assumptions

1. Percent married: 80% of employees are assumed to be married.
2. Age difference: Males are assumed to be three years older than females.
3. Percent electing annuity on death (when eligible): All of the spouses of married participants who die after becoming eligible for a retirement benefit are assumed to elect an annuity, in lieu of the \$18,000 lump sum and refund.
4. Election of deferred termination benefit: vested terminating members are assumed to elect a refund or a deferred benefit, whichever is more valuable at the time of termination.
5. Assumed age for commencement of deferred benefits: Members electing to receive a deferred benefit are assumed to commence receipt at age 62 (age 65 if hired on or after November 1, 2011).
6. Supplemental medical insurance: 50% of eligible members who are active or due a deferred vested benefit are assumed to elect the insurance benefit. For annuitants who began receiving a benefit in the year preceding the valuation date, 50% of those not already receiving the benefit are assumed to elect it. The liability for all other annuitants is based on the actual benefit being paid as shown in the data.
7. Members who retire with at least 24 years of credited service are assumed to have 120 days of unused sick leave for which they will receive one year of service credit. This assumption only applies to reduced and unreduced retirement.
8. No assumption was made that current active members employed by the comprehensive universities will elect to transfer out of TRS.
9. Reemployment, purchase of service, transfers: No recognition is made of (i) future member reimbursements upon reemployment, (ii) future purchase of additional service, or (iii) special transfer provisions.
10. For EESIP eligible employees, if the refund amount to be paid exceeds the actuarial present value of the additional benefit, then we assume the member does not elect the enhanced benefit.
11. Decrement timing: Decrements of all types are assumed to occur mid-year.
12. Actuarial equivalence factors are calculated using valuation assumptions. Mortality tables are projected from 2020 to 2030 using the Ultimate MP scale and blended 30%/70% for males/females. Payments are assumed to be made at the end of each month.

V. Valuation Data

Participant data was supplied on an electronic file for (i) active members, (ii) inactive vested members who are entitled to a future deferred benefit, (iii) inactive nonvested members who are entitled to a refund of their employee contributions, and in some cases a portion of the accumulated interest, and (iv) members and beneficiaries receiving benefits.

The data for active and inactive, non-retired members included date of birth, date of hire, gender, years of service, salary, employee contributions and accumulated interest on employee contributions. The data also included a code indicating the non-classified employees, and a code indicating the type of employer (comprehensive university, other college or university, or other employer). For retired members and beneficiaries, the data included date of birth, gender, spouse's date of birth (where applicable), amount of monthly benefit, date of retirement, and a form of payment code.

Individual member contributions for the 12 months prior to the valuation date were used to determine the actual salary for plan members in the prior plan year. The valuation assumptions for salary increases were used to determine the projected salary for the current plan year. Additionally, contributing members were assumed to accrue one additional year of service between the end of the prior employment year and the valuation date.

Additional assumptions were made to correct for missing or inconsistent data. These had no material impact on the results presented.

Some inactive, nonvested employees who are entitled to a refund are not included in the data, but a liability for their refund is included instead in the Suspense Fund, which is included in the liability.

VI. Actuarial Model

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.





Statistical Section

For fiscal year ending
June 30, 2023, TRS
retirees earned an
average annual
retirement benefit of
\$22,728.00.



Statistical Section Summary

The Statistical Section presents several schedules that provide financial trends analysis of the Teachers' Retirement System of Oklahoma's overall financial health and additional analytical information on membership data and retirement benefits.

The schedules presented are for the combined Plans unless noted as an individual Plan. The schedules beginning on page 120 through page 132 provide data depicting active membership, level of monthly benefits, years of service, and retirement options.

The schedules on page 133 through page 140 provide financial data showing revenues, expenses, and changes in net position.

On page 141 through page 145, the schedules report the financial impact of retirees in the state of Oklahoma and the participating employers.

The source of the information in these schedules is derived from internal information unless otherwise noted.

Retired Members by Type of Benefit - DB Plan

Fiscal Year Ended June 30, 2023

Amount of Monthly Benefit	Number of Retired Members	<u>Type of Retirement *</u>					<u>Option Selected #</u>				
		1	2	3	4	5	A	B	C	D	E
Under \$500	7,407	4,288	2,386	369	119	245	3,651	1,256	1,850	359	291
\$501-\$1,000	10,727	7,101	2,128	765	94	639	4,976	1,754	2,830	838	329
\$1,001-\$1,500	8,985	6,906	716	840	19	504	3,564	1,354	2,851	1,009	207
\$1,501-\$2,000	12,635	11,345	240	757	8	285	4,343	2,534	4,252	1,227	279
\$2,001-\$2,500	13,355	12,491	90	685	3	86	4,243	2,610	4,773	1,387	342
\$2,501-\$3,000	6,915	6,501	40	346	1	27	2,391	1,088	2,521	784	131
\$3,001-\$3,500	3,727	3,564	16	134	2	11	1,367	509	1,378	397	76
\$3,501-\$4,000	2,063	1,995	10	52	1	5	759	245	812	207	40
Over \$4,000	3,618	3,466	12	133	2	5	1,240	296	1,564	435	83
	Totals	57,657	5,638	4,081	249	1,807	26,534	11,646	22,831	6,643	1,778

* Type of Retirement

Type 1 - Normal retirement for age and service

Type 2 - Early retirement

Type 3 - Beneficiary payment (Normal retirement)

Type 4 - Beneficiary payment (Early retirement)

Type 5 - Disability retirement

Option Selected

Option A – The Maximum Retirement Plan – provides the greatest monthly lifetime benefit.

Option B – Retirement Option 1 – provides for a decreased rate of reduction of a member's account balance.

Option C – Retirement Option 2 – known as the 100% joint survivor annuity – provides for a reduced monthly benefit to the member for life. Upon the death of the member, the designated beneficiary will continue to receive the same monthly benefit for life.

Option D – Retirement Option 3 – known as the 50% joint survivor annuity – provides a similar benefit as Option 2; however, upon the death of the member, the monthly benefit to the designated beneficiary is one-half of the benefit of the member.

Option E – Retirement Option 4 – provides a reduced monthly benefit payable to the member for life. In the event of the member's death within 120 months from the date of retirement, the beneficiary continues to receive the member's monthly benefit until the 120th monthly retirement benefit has been paid.

Retired Members by Type of Benefit - OPEB Plan

Fiscal Year Ended June 30, 2023

Amount of Monthly Benefit	Number of Retired Members	<u>Type of Retirement *</u>					<u>Option Selected #</u>				
		1	2	3	4	5	A	B	C	D	E
Under \$500	598	344	216	0	0	38	319	128	116	19	16
\$501-\$1,000	1,840	1,340	341	0	0	159	926	372	403	92	47
\$1,001-\$1,500	2,399	2,095	163	0	1	140	1,006	443	697	200	53
\$1,501-\$2,000	4,267	4,111	69	0	0	87	1,572	943	1,254	401	97
\$2,001-\$2,500	4,944	4,884	30	0	0	30	1,666	1,007	1,595	551	125
\$2,501-\$3,000	2,891	2,860	19	0	0	12	1,020	485	981	350	55
\$3,001-\$3,500	1,660	1,648	7	0	0	5	623	236	596	178	27
\$3,501-\$4,000	984	977	6	0	0	1	368	118	383	98	17
Over \$4,000	1,834	1,823	6	1	1	3	664	155	767	210	38
Totals		20,082	857	1	2	475	8,164	3,887	6,792	2,099	475

* Type of Retirement

Type 1 - Normal retirement for age and service

Type 2 - Early retirement

Type 3 - Beneficiary payment (Normal retirement)

Type 4 - Beneficiary payment (Early retirement)

Type 5 - Disability retirement

Option Selected

Option A – The Maximum Retirement Plan – provides the greatest monthly lifetime benefit.

Option B – Retirement Option 1 – provides for a decreased rate of reduction of a member's account balance.

Option C – Retirement Option 2 – known as the 100% joint survivor annuity – provides for a reduced monthly benefit to the member for life. Upon the death of the member, the designated beneficiary will continue to receive the same monthly benefit for life.

Option D – Retirement Option 3 – known as the 50% joint survivor annuity – provides a similar benefit as Option 2; however, upon the death of the member, the monthly benefit to the designated beneficiary is one-half of the benefit of the member.

Option E – Retirement Option 4 – provides a reduced monthly benefit payable to the member for life. In the event of the member's death within 120 months from the date of retirement, the beneficiary continues to receive the member's monthly benefit until the 120th monthly retirement benefit has been paid.

Average Benefit Payments - DB Plan

Fiscal Years Ended June 30

Retirement Effective Date	Years of Credited Service							
	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40+
<u>Period 7/1/2013 to 6/30/2014</u>								
Average monthly benefit	\$ 407	\$ 798	\$ 1,172	\$ 1,703	\$ 2,190	\$ 2,796	\$ 3,521	\$ 4,443
Average final average salary	\$ 35,420	\$ 40,470	\$ 43,464	\$ 46,152	\$ 48,554	\$ 55,661	\$ 60,987	\$ 69,444
Number of retired members	235	337	335	498	557	482	335	167
<u>Period 7/1/2014 to 6/30/2015</u>								
Average monthly benefit	\$ 417	\$ 747	\$ 1,218	\$ 1,673	\$ 2,261	\$ 2,749	\$ 3,567	\$ 4,121
Average final average salary	\$ 35,345	\$ 38,407	\$ 44,188	\$ 45,736	\$ 50,004	\$ 55,046	\$ 61,810	\$ 63,623
Number of retired members	240	419	403	468	644	504	352	170
<u>Period 7/1/2015 to 6/30/2016</u>								
Average monthly benefit	\$ 448	\$ 754	\$ 1,264	\$ 1,773	\$ 2,316	\$ 2,786	\$ 3,650	\$ 4,363
Average final average salary	\$ 37,695	\$ 38,868	\$ 46,885	\$ 49,917	\$ 52,157	\$ 56,599	\$ 64,207	\$ 68,359
Number of retired members	243	407	413	389	606	433	323	176
<u>Period 7/1/2016 to 6/30/2017</u>								
Average monthly benefit	\$ 470	\$ 745	\$ 1,268	\$ 1,847	\$ 2,360	\$ 2,976	\$ 3,935	\$ 4,523
Average final average salary	\$ 39,571	\$ 38,864	\$ 46,334	\$ 53,050	\$ 53,235	\$ 59,824	\$ 68,654	\$ 69,286
Number of retired members	293	410	392	471	624	465	290	175
<u>Period 7/1/2017 to 6/30/2018</u>								
Average monthly benefit	\$ 437	\$ 764	\$ 1,282	\$ 1,777	\$ 2,386	\$ 2,968	\$ 3,747	\$ 4,381
Average final average salary	\$ 37,791	\$ 39,234	\$ 46,785	\$ 50,356	\$ 53,883	\$ 60,355	\$ 65,413	\$ 68,236
Number of retired members	279	449	394	379	521	409	256	165
<u>Period 7/1/2018 to 6/30/2019</u>								
Average monthly benefit	\$ 436	\$ 792	\$ 1,296	\$ 1,805	\$ 2,447	\$ 2,979	\$ 3,974	\$ 4,608
Average final average salary	\$ 38,602	\$ 41,518	\$ 47,917	\$ 52,545	\$ 56,265	\$ 61,587	\$ 69,781	\$ 71,046
Number of retired members	229	388	340	389	431	373	174	139
<u>Period 7/1/2019 to 6/30/2020</u>								
Average monthly benefit	\$ 461	\$ 813	\$ 1,233	\$ 1,792	\$ 2,483	\$ 3,101	\$ 4,034	\$ 4,795
Average final average salary	\$ 41,419	\$ 42,846	\$ 46,435	\$ 52,200	\$ 56,946	\$ 63,415	\$ 71,470	\$ 74,653
Number of retired members	267	405	372	395	448	396	184	126
<u>Period 7/1/2020 to 6/30/2021</u>								
Average monthly benefit	\$ 428	\$ 832	\$ 1,233	\$ 1,865	\$ 2,525	\$ 3,188	\$ 3,886	\$ 4,747
Average final average salary	\$ 37,710	\$ 44,070	\$ 46,888	\$ 53,211	\$ 58,430	\$ 64,827	\$ 68,133	\$ 74,352
Number of retired members	280	360	346	441	445	549	286	214
<u>Period 7/1/2021 to 6/30/2022</u>								
Average monthly benefit	\$ 493	\$ 862	\$ 1,264	\$ 1,977	\$ 2,530	\$ 3,452	\$ 4,373	\$ 5,181
Average final average salary	\$ 43,622	\$ 45,519	\$ 48,019	\$ 57,370	\$ 59,304	\$ 70,310	\$ 77,173	\$ 80,538
Number of retired members	333	392	500	491	479	558	271	201
<u>Period 7/1/2022 to 6/30/2023</u>								
Average monthly benefit	\$ 513	\$ 817	\$ 1,323	\$ 1,998	\$ 2,728	\$ 3,547	\$ 4,288	\$ 4,935
Average final average salary	\$ 44,670	\$ 43,058	\$ 49,586	\$ 57,475	\$ 64,397	\$ 70,876	\$ 76,592	\$ 76,777
Number of retired members	334	411	422	430	432	498	240	146

Average Benefit Payments - OPEB Plan

Fiscal Years Ended June 30

<u>Retirement Effective Date</u>	<u>Years of Credited Service</u>						
	<u>10-15</u>	<u>15-20</u>	<u>20-25</u>	<u>25-30</u>	<u>30-35</u>	<u>35-40</u>	<u>40+</u>
<u>Period 7/1/2016 to 6/30/2017</u>							
Average monthly benefit	\$874	\$1,571	\$2,241	\$2,519	\$3,143	\$3,979	\$4,579
Average final average salary	\$45,463	\$56,337	\$63,815	\$56,878	\$62,858	\$69,937	\$69,607
Number of retired members	89	112	153	277	193	161	106
<u>Period 7/1/2017 to 6/30/2018</u>							
Average monthly benefit	\$944	\$1,677	\$2,125	\$2,643	\$3,393	\$3,956	\$4,601
Average final average salary	\$48,553	\$60,554	\$59,353	\$59,772	\$67,808	\$68,212	\$70,527
Number of retired members	84	108	124	229	177	139	97
<u>Period 7/1/2018 to 6/30/2019</u>							
Average monthly benefit	\$892	\$1,649	\$2,170	\$2,562	\$3,148	\$4,043	\$4,849
Average final average salary	\$45,259	\$59,284	\$62,533	\$58,915	\$64,782	\$70,467	\$73,586
Number of retired members	81	101	130	163	164	98	76
<u>Period 7/1/2019 to 6/30/2020</u>							
Average monthly benefit	\$986	\$1,506	\$2,168	\$2,763	\$3,283	\$4,220	\$5,007
Average final average salary	\$52,536	\$56,346	\$63,409	\$63,500	\$65,750	\$74,280	\$77,123
Number of retired members	76	94	122	182	179	103	75
<u>Period 7/1/2020 to 6/30/2021</u>							
Average monthly benefit	\$1,134	\$1,455	\$2,074	\$2,797	\$3,370	\$3,995	\$4,979
Average final average salary	\$60,154	\$55,380	\$59,362	\$64,985	\$67,728	\$69,405	\$76,991
Number of retired members	66	85	162	170	280	163	121
<u>Period 7/1/2021 to 6/30/2022</u>							
Average monthly benefit	\$1,051	\$1,561	\$2,356	\$2,789	\$3,758	\$4,697	\$5,400
Average final average salary	\$55,009	\$58,871	\$68,618	\$65,772	\$76,155	\$81,481	\$83,730
Number of retired members	88	144	163	221	293	158	117
<u>Period 7/1/2022 to 6/30/2023</u>							
Average monthly benefit	\$841	\$1,552	\$2,296	\$3,297	\$3,938	\$4,998	\$5,609
Average final average salary	\$43,633	\$58,364	\$66,115	\$78,307	\$78,181	\$88,971	\$88,109
Number of retired members	71	95	130	130	168	93	45

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

Principal Participating Employers

Current Year (2023) and Nine Years Ago (2014)

Participating Employer	Fiscal Year 2023			Fiscal Year 2014		
	Covered Members	Rank	Percentage of Total	Covered Members	Rank	Percentage of Total
OKLAHOMA CITY PUBLIC SCHOOLS	5,203	1	4.92%	5,142	1	5.44%
TULSA PUBLIC SCHOOLS	4,266	2	4.04%	3,847	3	4.07%
EDMOND PUBLIC SCHOOLS	3,122	3	2.95%	2,472	6	2.62%
OKLAHOMA STATE UNIVERSITY	3,001	4	2.84%	4,061	2	4.30%
MOORE PUBLIC SCHOOLS	2,962	5	2.80%	2,552	5	2.70%
UNIVERSITY OF OKLAHOMA	2,935	6	2.78%	2,652	4	2.81%
PUTNAM CITY PUBLIC SCHOOLS	2,534	7	2.40%	1,736	9	1.84%
BROKEN ARROW PUBLIC SCHOOLS	2,231	8	2.11%	1,682	10	1.78%
NORMAN PUBLIC SCHOOLS	2,051	9	1.94%	1,585	12	1.68%
OU HEALTH SCIENCES CENTER	1,977	10	1.87%	1,915	7	2.03%
* All Other	75,371		71.34%	66,824		70.74%
Total (599 Employers)	105,653		100.00%	94,468		100.00%

*In Fiscal Year 2023, "all other" consisted of:

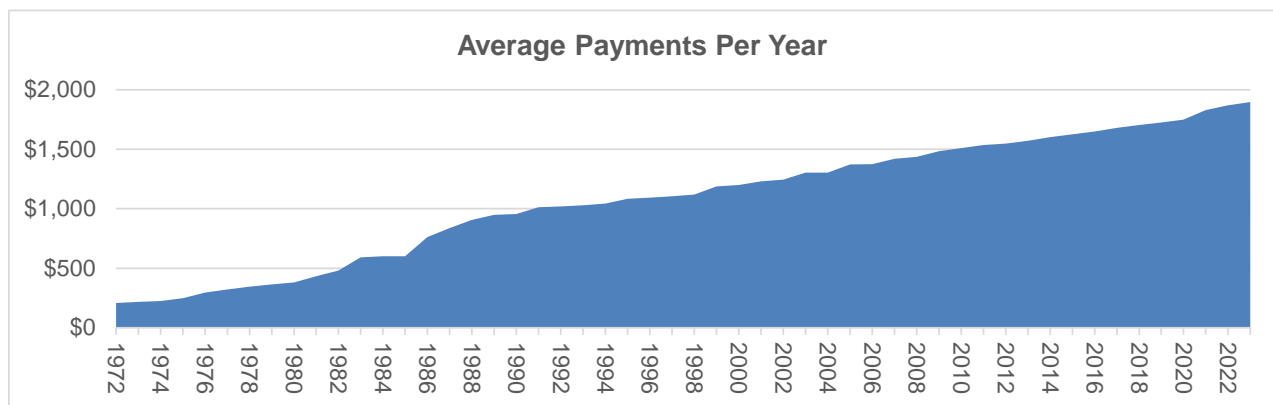
Type	Participating Employers
School Districts	503
Higher Education	24
Career Technology	28
Other	15
State Agencies	19
Total	589

Schedule of Average Payment Amounts

Fiscal Year Ended June 30

Date	Regular Annuitants	Date	Regular Annuitants	Special Annuitants
June 30, 1948	\$ 33	June 30, 1990	\$ 956	\$ 159
June 30, 1954	\$ 75	June 30, 1991	\$ 1,013	\$ 159
June 30, 1960	\$ 83	June 30, 1992	\$ 1,021	\$ 159
June 30, 1970	\$ 179	June 30, 1993	\$ 1,030	\$ 159
June 30, 1972	\$ 209	June 30, 1994	\$ 1,044	\$ 159
June 30, 1973	\$ 217	June 30, 1995	\$ 1,084	\$ 163
June 30, 1974	\$ 226	June 30, 1996	\$ 1,093	\$ 163
June 30, 1975	\$ 248	June 30, 1997	\$ 1,105	\$ 163
June 30, 1976	\$ 297	June 30, 1998	\$ 1,119	\$ 163
June 30, 1977	\$ 321	June 30, 1999	\$ 1,187	\$ 172
June 30, 1978	\$ 345	June 30, 2000	\$ 1,199	\$ 172
June 30, 1979	\$ 365	June 30, 2001	\$ 1,231	\$ 175
June 30, 1980	\$ 382	June 30, 2002	\$ 1,246	\$ 175
June 30, 1981	\$ 432	June 30, 2003	\$ 1,304	\$ 175
June 30, 1982	\$ 480	June 30, 2004	\$ 1,304	\$ 180
June 30, 1983	\$ 592	June 30, 2005	\$ 1,373	\$ 187
June 30, 1984	\$ 600	June 30, 2006	\$ 1,376	\$ 191
June 30, 1985	\$ 600	June 30, 2007	\$ 1,419	\$ 191
June 30, 1986	\$ 761	June 30, 2008	\$ 1,437	\$ 191
June 30, 1987	\$ 837	June 30, 2009	\$ 1,483	\$ 194
June 30, 1988	\$ 907	June 30, 2010	\$ 1,511	\$ 195
June 30, 1989	\$ 949	June 30, 2011	\$ 1,537	\$ 195
		June 30, 2012	\$ 1,547	\$ 195
		June 30, 2013	\$ 1,571	\$ 195
		June 30, 2014	\$ 1,601	\$ 195
		June 30, 2015	\$ 1,627	\$ 195
		June 30, 2016	\$ 1,650	\$ 195
		June 30, 2017	\$ 1,681	\$ 195
		June 30, 2018	\$ 1,705	\$ 195
		June 30, 2019	\$ 1,726	\$ 195
		June 30, 2020	\$ 1,749	\$ 195
		June 30, 2021	\$ 1,830	\$ -
		June 30, 2022	\$ 1,869	\$ -
		June 30, 2023	\$ 1,897	\$ -

Note that amounts after June 30, 1989, do not include monthly medical premiums.



Active Personnel

Fiscal Year Ended June 30, 2023

Years of Service	Active Personnel
Under 5 years	44,755
5-9	18,103
10-14	12,365
15-19	10,177
20-24	7,800
25-29	4,785
30-34	2,096
35-39	620
40-44	203
45-49	45
50-54	6
55-59	4
Totals	100,959

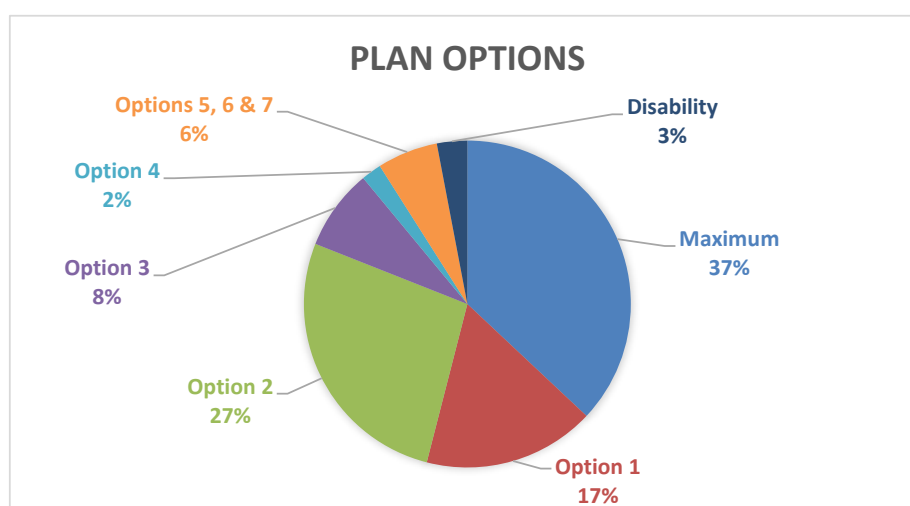
Salary Range	Active Personnel
Under \$5,000	2,375
\$5,001-\$10,000	2,514
\$10,001-\$15,000	5,822
\$15,001-\$20,000	6,825
\$20,001-\$25,000	5,023
\$25,001-\$30,000	3,832
\$30,001-\$35,000	6,241
\$35,001-\$40,000	11,577
\$40,001-\$45,000	12,604
\$45,001-\$50,000	10,698
\$50,001-\$55,000	8,048
\$55,001-\$60,000	5,677
\$60,001-\$65,000	3,955
\$65,001-\$70,000	2,963
\$70,001-\$75,000	2,439
\$75,001 and Above	10,366
Totals	100,959

Average Age (years)	45.4
Average Salary	\$45,362.63
Average Service (years)	9.1

Schedule of Retired Members by Type of Benefits - DB Plan

Selected Plan Options
Fiscal Year Ended June 30, 2023

Option	Retired Members			Average Monthly Payment	% of Total
	Male	Female	Total		
Maximum	4,385	20,856	25,241	\$ 1,789	37%
Option 1	2,285	9,360	11,645	\$ 1,781	17%
Option 2	8,965	10,081	19,046	\$ 2,144	27%
Option 3	1,895	3,748	5,643	\$ 2,255	8%
Option 4	445	1,274	1,719	\$ 1,706	2%
Options 5, 6 & 7	1,321	3,011	4,332	\$ 1,637	6%
Disability	459	1,347	1,806	\$ 1,116	3%
Totals	19,755	49,677	69,432	\$ 1,897	100%



Maximum – provides for the greatest possible benefit at a dollar for dollar reduction of the member's retirement account.

Option 1 – provides for a slightly decreased benefit at a decreased rate of reduction of the member's account balance.

Option 2 – provides for a reduced monthly benefit to the member for life. Upon death of the member, the designated beneficiary will continue to receive the same monthly benefit for life.

Option 3 – provides a similar benefit as Option 2; however, upon death of the member, the monthly benefit to the designated beneficiary is one-half of the benefit of the member.

Option 4 – provides a reduced monthly benefit. In the event of the member's death within 120 months from the date of retirement, the balance of the payments are continued to the beneficiary designated at the time of retirement.

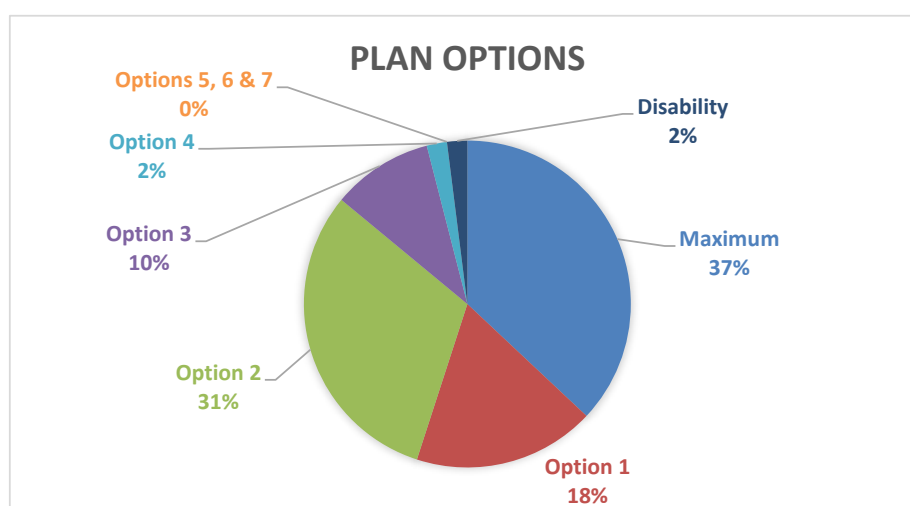
Options 5, 6 & 7 – represents beneficiaries of options 2, 3 & 4.

Disability – upon meeting requirements, a vested member may receive a monthly benefit.

Schedule of Retired Members by Type of Benefits - OPEB Plan

Selected Plan Options
Fiscal Year Ended June 30, 2023

Option	Retired Members			Average Monthly Payment	% of Total
	Male	Female	Total		
Maximum	1,367	6,411	7,778	\$ 2,282	37%
Option 1	833	3,053	3,886	\$ 2,094	18%
Option 2	3,216	3,486	6,702	\$ 2,561	31%
Option 3	791	1,308	2,099	\$ 2,535	10%
Option 4	131	345	476	\$ 2,224	2%
Options 5, 6 & 7	0	2	2	\$ 3,219	0%
Disability	92	382	474	\$ 1,251	2%
Totals	6,430	14,987	21,417	\$ 2,336	100%



Maximum – provides for the greatest possible benefit at a dollar for dollar reduction of the member's retirement account.

Option 1 – provides for a slightly decreased benefit at a decreased rate of reduction of the member's account balance.

Option 2 – provides for a reduced monthly benefit to the member for life. Upon death of the member, the designated beneficiary will continue to receive the same monthly benefit for life.

Option 3 – provides a similar benefit as Option 2; however, upon death of the member, the monthly benefit to the designated beneficiary is one-half of the benefit of the member.

Option 4 – provides a reduced monthly benefit. In the event of the member's death within 120 months from the date of retirement, the balance of the payments are continued to the beneficiary designated at the time of retirement.

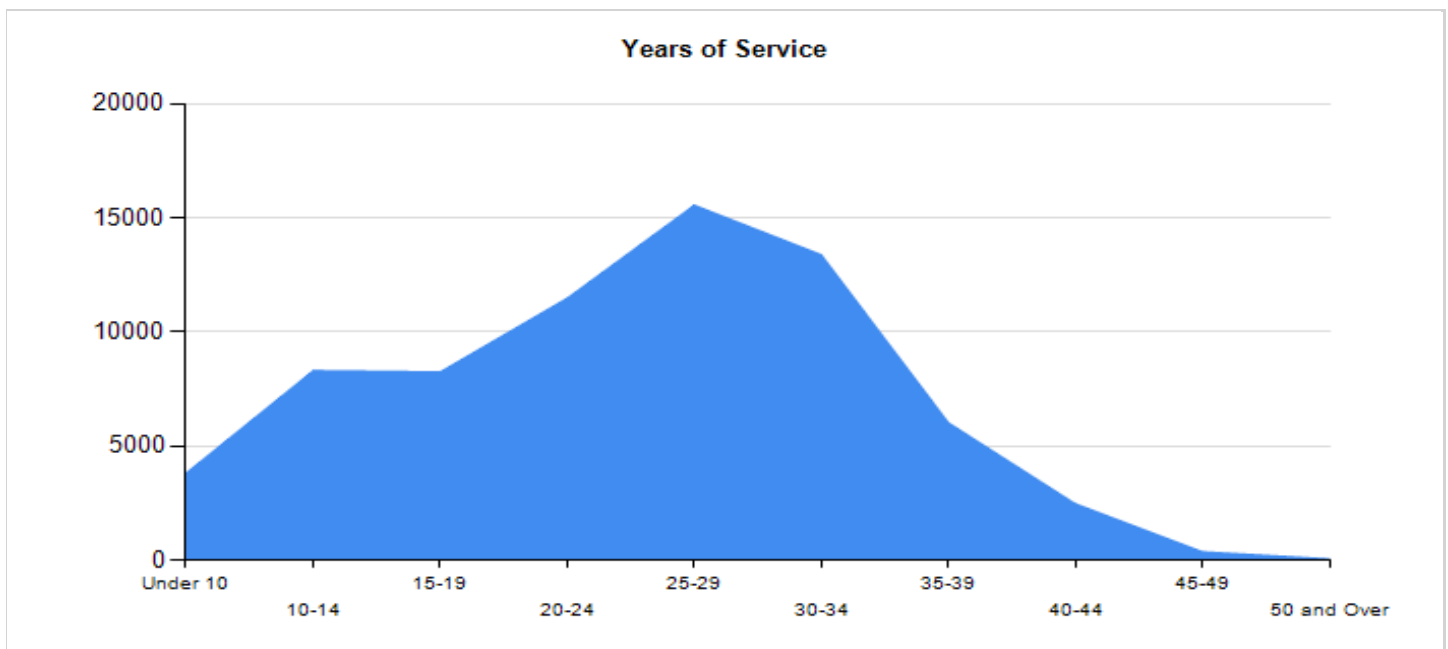
Options 5, 6 & 7 – represents beneficiaries of options 2, 3 & 4.

Disability – upon meeting requirements, a vested member may receive a monthly benefit.

Distribution by Years of Service

Fiscal Year Ended June 30, 2023

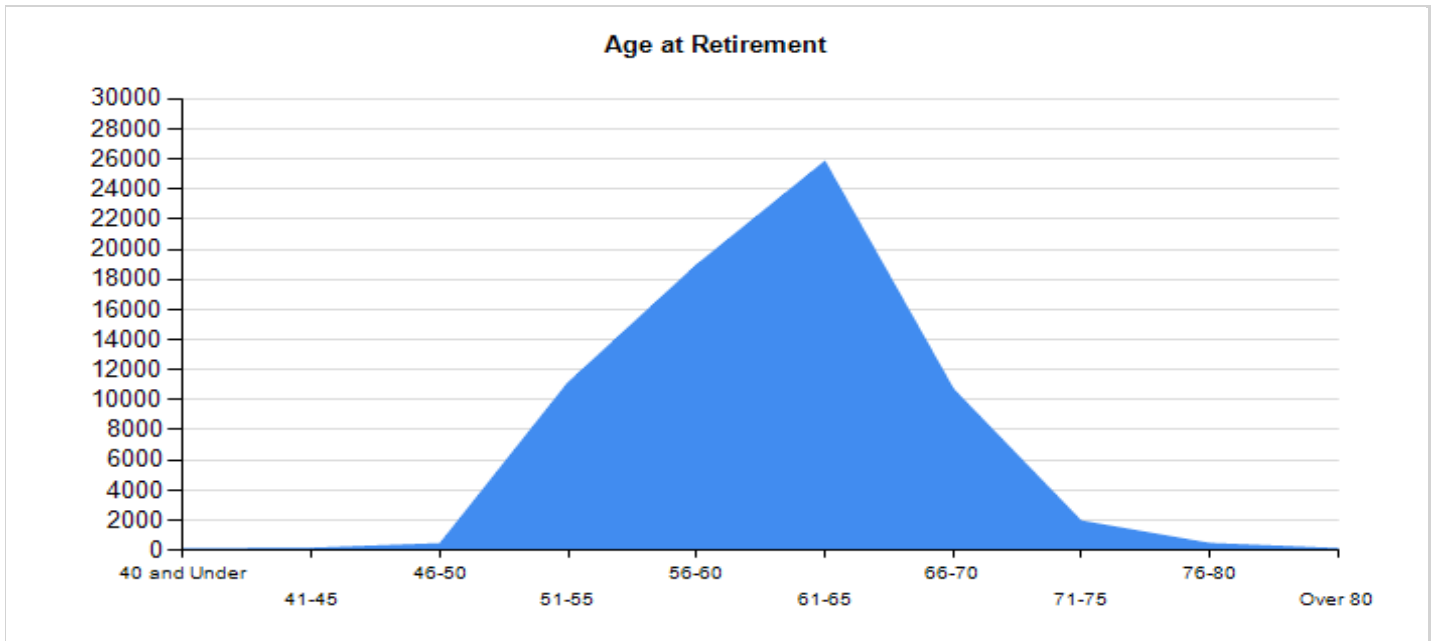
Years of Creditable Service	Retired Members			Average Monthly Payment
	Male	Female	Total	
Under 10	1,226	2,578	3,804	\$ 435
10-14	2,217	6,055	8,272	\$ 670
15-19	2,072	6,142	8,214	\$ 1,066
20-24	2,503	8,930	11,433	\$ 1,559
25-29	4,120	11,365	15,485	\$ 2,061
30-34	4,311	9,012	13,323	\$ 2,550
35-39	2,171	3,835	6,006	\$ 3,302
40-44	959	1,507	2,466	\$ 4,031
45-49	145	225	370	\$ 4,664
50 and Over	30	29	59	\$ 5,512
Totals	19,754	49,678	69,432	\$ 1,897



Distribution by Age at Retirement

Fiscal Year Ended June 30, 2023

Age at Retirement	Retired Members			Average Monthly Payment	Average Length of Service (Years)
	Male	Female	Total		
40 and Under	22	63	85	\$ 752	13.0
41-45	33	98	131	\$ 1,049	15.9
46-50	114	310	424	\$ 1,331	20.2
51-55	3,810	7,270	11,080	\$ 2,132	28.7
56-60	4,932	13,928	18,860	\$ 1,886	25.8
61-65	6,737	18,970	25,707	\$ 1,787	23.1
66-70	3,183	7,490	10,673	\$ 1,944	22.7
71-75	707	1,219	1,926	\$ 1,988	23.1
76-80	175	264	439	\$ 1,915	23.7
Over 80	41	66	107	\$ 1,756	24.3
Totals	19,754	49,678	69,432	\$ 1,897	24.6

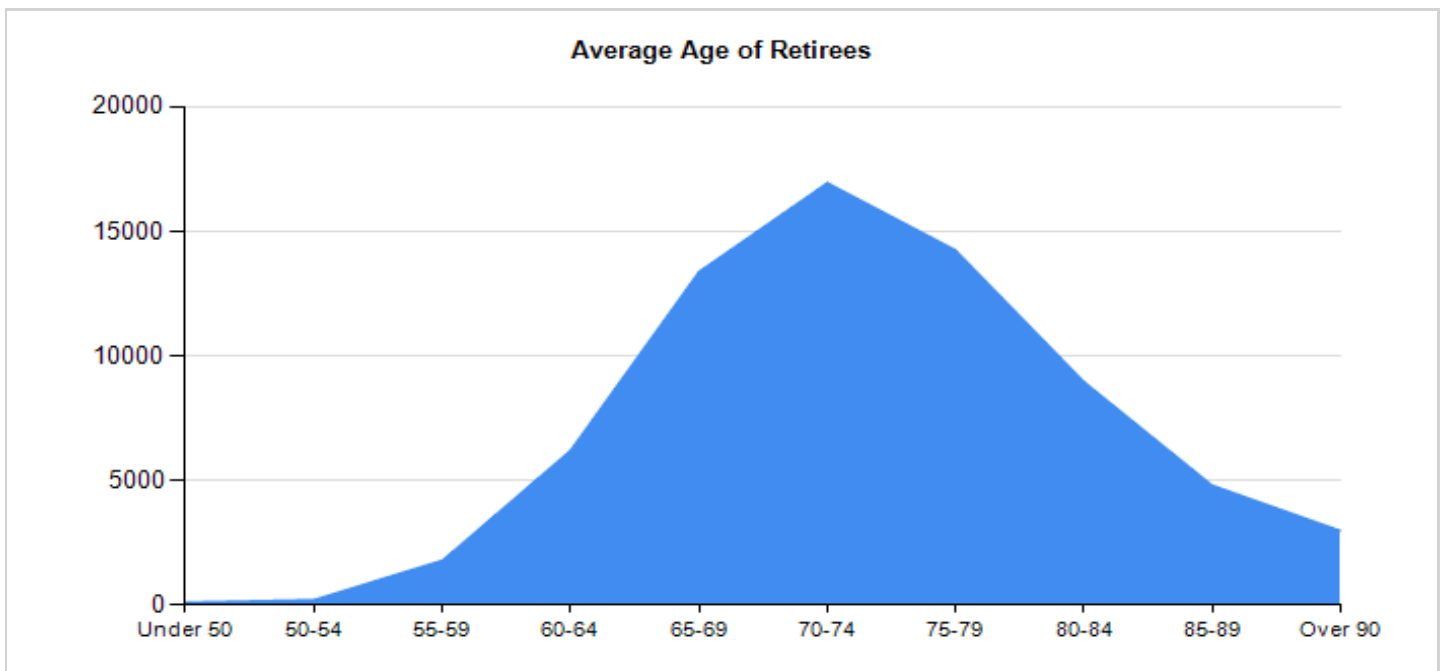


Distribution by Retiree Age

Fiscal Year Ended June 30, 2023

Age	Total Retired Members	Average Length of Service	Average Monthly Payment
Under 50	118	19.4	\$ 1,405
50-54	218	22.3	\$ 1,975
55-59	1,798	27.5	\$ 2,561
60-64	6,198	25.6	\$ 2,274
65-69	13,332	24.2	\$ 2,046
70-74	16,878	24.4	\$ 1,948
75-79	14,186	24.8	\$ 1,856
80-84	8,936	24.3	\$ 1,639
85-89	4,792	24.1	\$ 1,463
Over 90	2,976	24.6	\$ 1,358
Totals	69,432	24.6	\$ 1,897

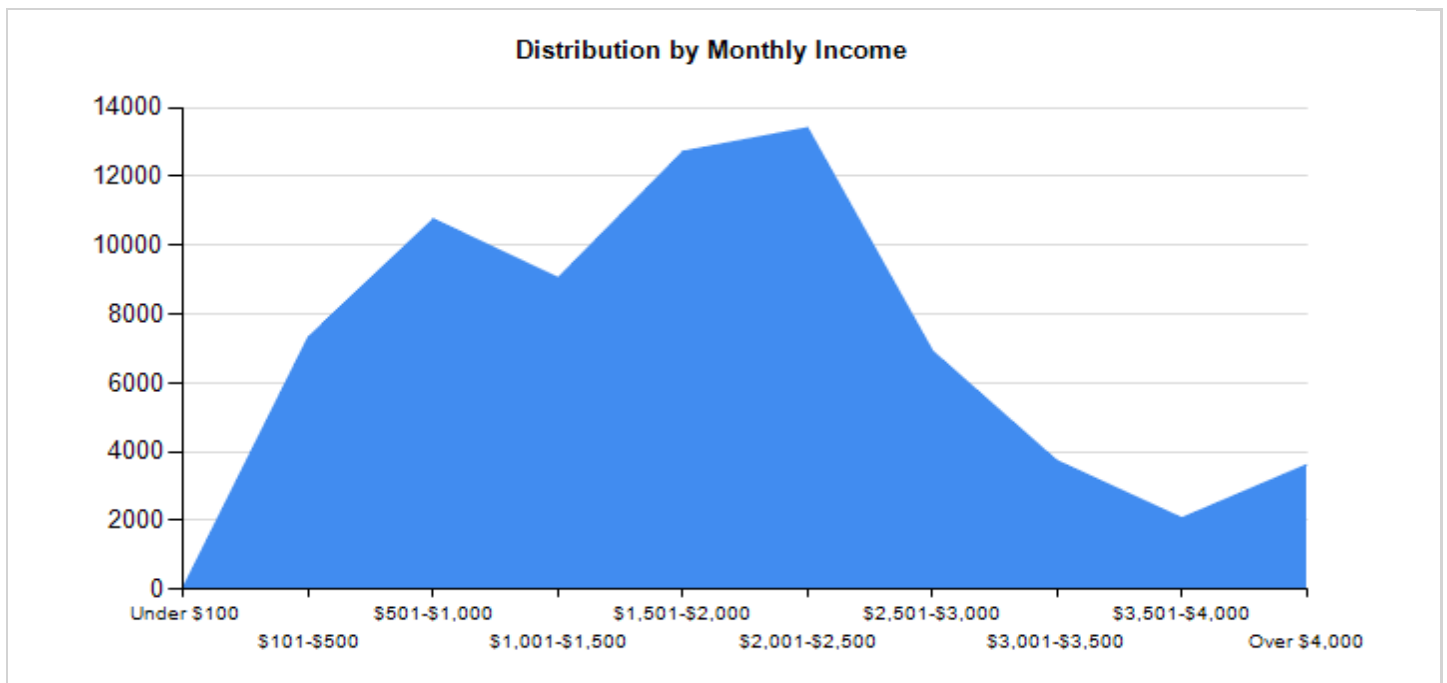
Average age of retired members is 73.2 years.



Distribution by Monthly Income

Fiscal Year Ended June 30, 2023

Monthly Income	Retired Members	Total	Average Payment
Under \$100	88	\$ 7,455	\$ 85
\$101-\$500	7,309	\$ 2,425,072	\$ 330
\$501-\$1,000	10,717	\$ 7,959,192	\$ 739
\$1,001-\$1,500	9,014	\$ 11,341,704	\$ 1,252
\$1,501-\$2,000	12,665	\$ 22,457,548	\$ 1,765
\$2,001-\$2,500	13,352	\$ 29,927,211	\$ 2,231
\$2,501-\$3,000	6,906	\$ 18,879,026	\$ 2,721
\$3,001-\$3,500	3,721	\$ 12,070,502	\$ 3,228
\$3,501-\$4,000	2,060	\$ 7,723,284	\$ 3,729
Over \$4,000	3,600	\$ 19,309,958	\$ 5,339
Totals	69,432	\$ 132,100,951	\$ 1,897



Schedule of Changes in Net Position - DB Plan

For Periods Ended June 30

Year	Additions				Deductions			Total Changes in Net Position
	Contributions		State and Federal Matching	Net Investment Income	Benefit Payments	Refunds and Annuity Payments	Administrative Expenses	
	Member	Employer						
2014 *	\$ 301,300,811	\$ 386,895,127	\$ 320,157,548	\$ 2,571,707,952	\$ 1,153,051,607	\$ 28,718,256	\$ 4,282,605	\$ 2,394,008,970
2015 *	\$ 303,677,304	\$ 392,051,458	\$ 336,390,612	\$ 428,855,747	\$ 1,201,350,906	\$ 35,240,176	\$ 4,358,938	\$ 220,025,101
2016 *	\$ 294,459,091	\$ 409,753,221	\$ 315,671,996	\$ (357,443,248)	\$ 1,257,276,705	\$ 36,109,832	\$ 4,458,338	\$ (635,403,815)
2017 *	\$ 292,949,337	\$ 396,743,812	\$ 301,951,901	\$ 1,945,898,975	\$ 1,281,816,606	\$ 40,944,298	\$ 4,028,080	\$ 1,610,755,041
2018 *	\$ 312,866,576	\$ 413,068,467	\$ 344,610,101	\$ 1,455,605,848	\$ 1,323,912,271	\$ 42,940,983	\$ 4,200,021	\$ 1,155,097,717
2019 *	\$ 325,766,148	\$ 446,161,917	\$ 371,671,157	\$ 785,418,294	\$ 1,378,984,998	\$ 38,002,018	\$ 5,194,983	\$ 506,835,517
2020 *	\$ 340,057,646	\$ 457,391,205	\$ 359,365,710	\$ 117,011,983	\$ 1,396,258,730	\$ 35,183,705	\$ 5,266,375	\$ (162,882,266)
2021 *	\$ 343,474,401	\$ 458,248,765	\$ 311,290,424	\$ 5,419,605,754	\$ 1,485,469,024	\$ 31,939,815	\$ 5,446,164	\$ 5,009,764,341
2022 *	\$ 366,066,840	\$ 495,861,085	\$ 471,548,132	\$ (2,026,810,561)	\$ 1,559,682,030	\$ 38,398,988	\$ 5,837,976	\$ (2,297,253,498)
2023 *	\$ 371,519,419	\$ 510,241,100	\$ 513,732,189	\$ 1,443,055,046	\$ 1,598,943,437	\$ 50,552,204	\$ 6,805,284	\$ 1,182,246,829

* - Net investment income includes both securities lending income and realized and unrealized gains and losses on investments.

Schedule of Changes in Net Position - OPEB Plan

For Period Ended June 30

Year	Additions		Deductions		Total Changes in Net Position
	Contributions Employer	Net Investment Income	Benefit Payments	Administrative Expenses	
2017 *	\$ 6,513,158	\$ 62,298,027	\$ 30,309,127	\$ 26,457	\$ 38,475,601
2018 *	\$ 2,912,563	\$ 44,760,425	\$ 36,963,620	\$ 11,427	\$ 10,697,941
2019 *	\$ 877,761	\$ 22,898,576	\$ 35,701,014	\$ 3,987	\$ (11,928,664)
2020 *	\$ 914,797	\$ 3,222,561	\$ 35,672,198	\$ 4,165	\$ (31,539,005)
2021 *	\$ 6,087,850	\$ 141,791,999	\$ 35,159,837	\$ 29,789	\$ 112,690,223
2022 *	\$ -	\$ (50,851,607)	\$ 34,556,094	\$ -	\$ (85,407,701)
2023 *	\$ 2,731,578	\$ 34,184,011	\$ 34,921,903	\$ 13,321	\$ 1,980,365

* - Net investment income includes both securities lending income and realized and unrealized gains and losses on investments.

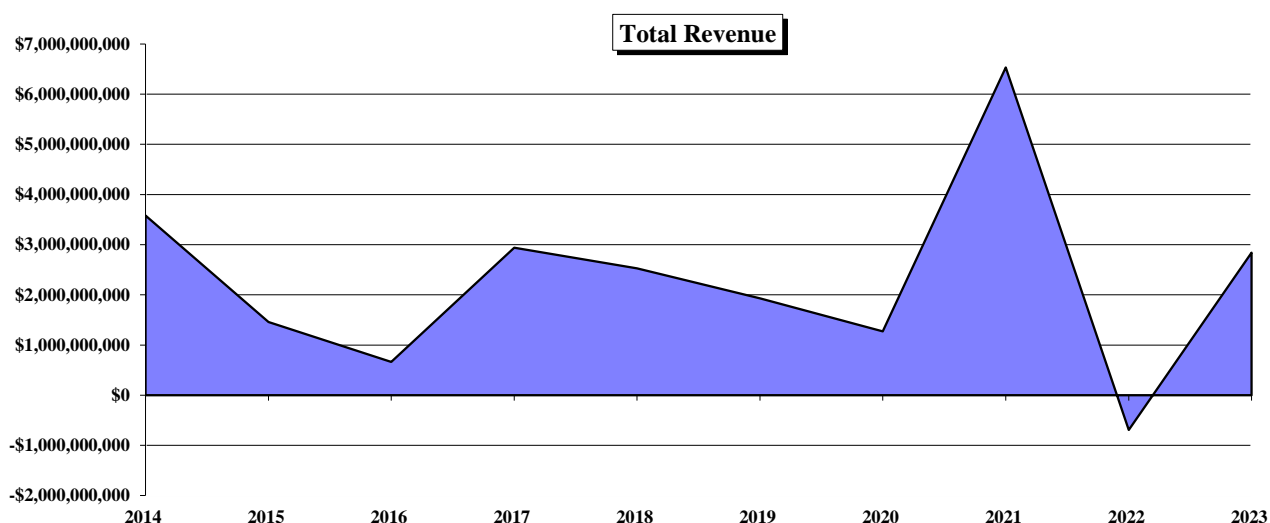
Information to present a 10-year history is not readily available

Schedule of Revenue by Source - DB Plan

For Periods Ended June 30

Year	Member Contributions	Employer Contributions	State of Oklahoma and Various Grant Sources	Net Investment Income	Other Revenue	Total
2014 *	\$ 301,300,811	\$ 386,895,127	\$ 320,157,548	\$ 2,563,117,816	\$ 8,590,136	\$ 3,580,061,438
2015 *	\$ 303,677,304	\$ 392,051,458	\$ 336,390,612	\$ 417,023,224	\$ 11,832,523	\$ 1,460,975,121
2016 *	\$ 294,459,091	\$ 409,753,221	\$ 315,671,996	\$ (365,314,005)	\$ 7,870,757	\$ 662,441,060
2017 *	\$ 292,949,337	\$ 396,743,812	\$ 301,951,901	\$ 1,937,463,392	\$ 8,435,583	\$ 2,937,544,025
2018 *	\$ 312,866,576	\$ 413,068,467	\$ 344,610,101	\$ 1,448,090,255	\$ 7,515,593	\$ 2,526,150,992
2019 *	\$ 325,766,148	\$ 446,161,917	\$ 371,671,157	\$ 779,314,080	\$ 6,104,214	\$ 1,929,017,516
2020 *	\$ 340,057,646	\$ 457,391,205	\$ 359,365,710	\$ 110,576,703	\$ 6,435,280	\$ 1,273,826,544
2021 *	\$ 343,474,401	\$ 458,248,765	\$ 311,290,424	\$ 5,415,132,702	\$ 4,473,052	\$ 6,532,619,344
2022 *	\$ 366,066,840	\$ 495,861,085	\$ 471,548,132	\$ (2,031,150,129)	\$ 4,339,568	\$ (693,334,504)
2023 *	\$ 371,519,419	\$ 510,241,100	\$ 513,732,189	\$ 1,437,197,429	\$ 5,857,617	\$ 2,838,547,754

* - Investment income includes both realized and unrealized gains and losses on investments.



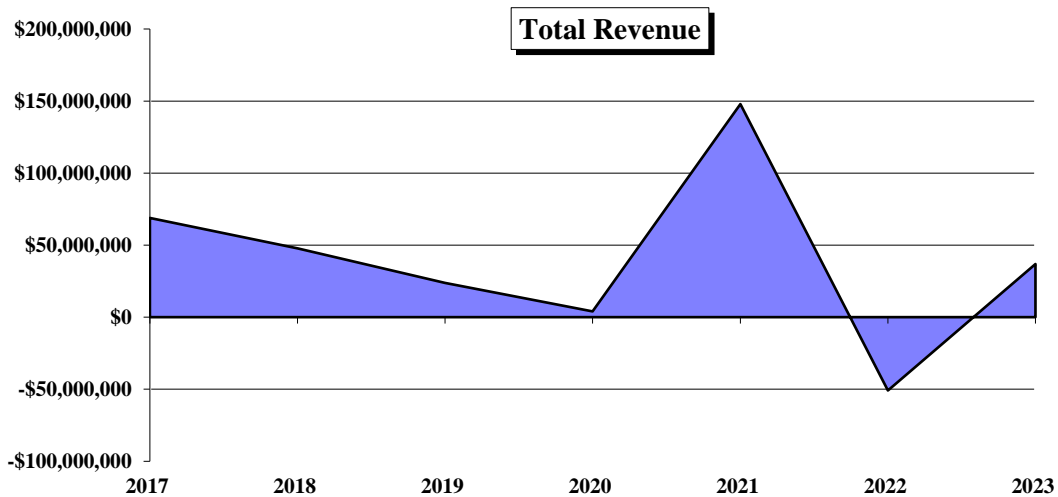
Schedule of Revenue by Source - OPEB Plan

For Periods Ended June 30

Year		Employer Contributions	Net Investment Income	Total
2017	*	\$ 6,513,158	\$ 62,298,027	\$ 68,811,185
2018	*	\$ 2,912,563	\$ 44,760,425	\$ 47,672,988
2019	*	\$ 877,761	\$ 22,898,576	\$ 23,776,337
2020	*	\$ 914,797	\$ 3,222,561	\$ 4,137,358
2021	*	\$ 6,087,850	\$ 141,791,999	\$ 147,879,849
2022	*	\$ -	\$ (50,851,607)	\$ (50,851,607)
2023	*	\$ 2,731,578	\$ 34,184,011	\$ 36,915,589

* Investment income includes both realized and unrealized gains and losses on investments.

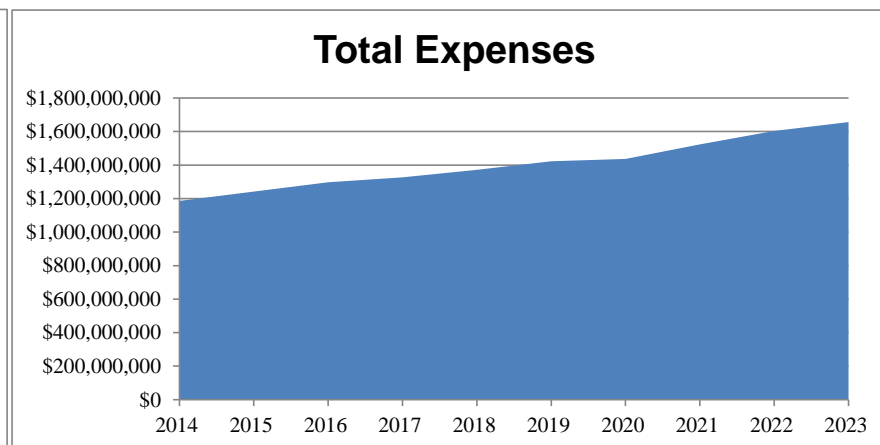
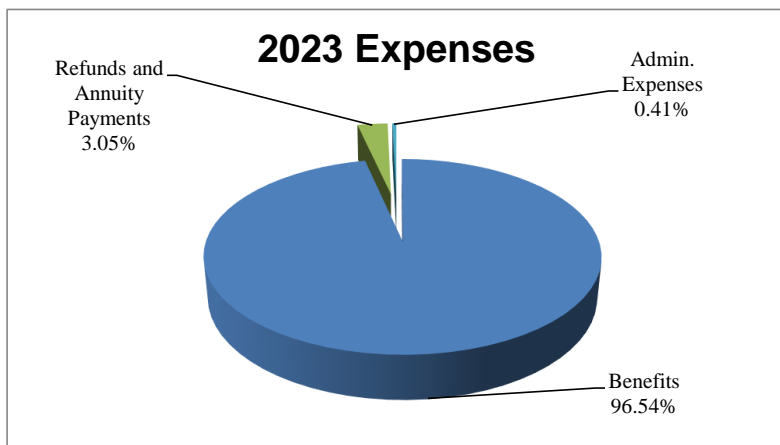
Information to present a 10-year history is not readily available.



Schedule of Expenses by Type - DB Plan

For Periods Ended June 30

Year	Benefits	Refunds and Annuity Payments	Administrative Expenses	Total
2014	\$ 1,153,051,607	\$ 28,718,256	\$ 4,282,605	\$ 1,186,052,468
2015	\$ 1,201,350,907	\$ 35,240,176	\$ 4,358,938	\$ 1,240,950,021
2016	\$ 1,257,276,705	\$ 36,109,832	\$ 4,458,338	\$ 1,297,844,875
2017	\$ 1,281,816,606	\$ 40,944,298	\$ 4,028,080	\$ 1,326,788,984
2018	\$ 1,323,912,271	\$ 42,940,983	\$ 4,200,021	\$ 1,371,053,275
2019	\$ 1,378,984,998	\$ 38,002,018	\$ 5,194,983	\$ 1,422,181,999
2020	\$ 1,396,258,730	\$ 35,183,705	\$ 5,266,375	\$ 1,436,708,810
2021	\$ 1,485,469,024	\$ 31,939,815	\$ 5,446,164	\$ 1,522,855,003
2022	\$ 1,559,682,030	\$ 38,398,988	\$ 5,837,976	\$ 1,603,918,994
2023	\$ 1,598,943,437	\$ 50,552,204	\$ 6,805,284	\$ 1,656,300,925

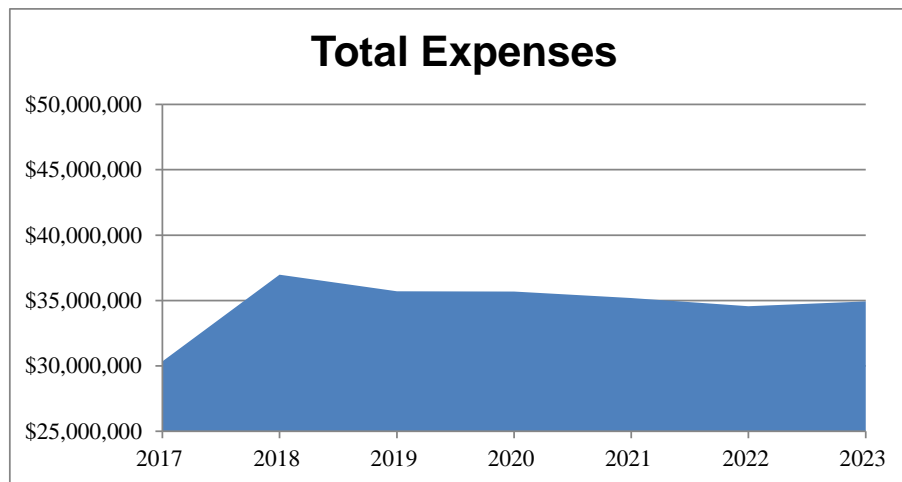
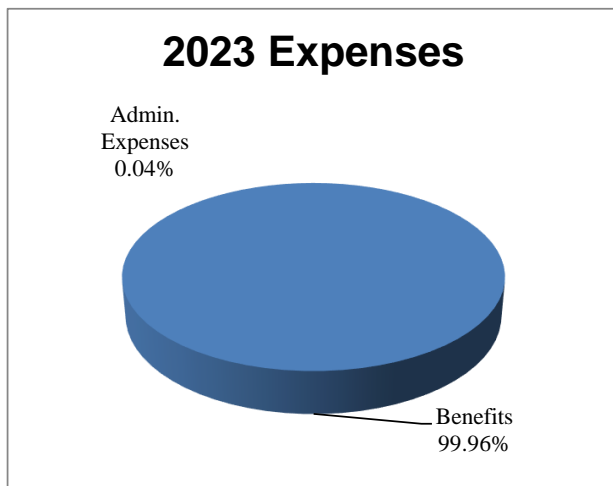


Schedule of Expenses by Type - OPEB Plan

For Periods Ended June 30

Year	Benefits	Administrative Expenses	Total
2017	\$ 30,309,127	\$ 26,457	\$ 30,335,584
2018	\$ 36,963,620	\$ 11,427	\$ 36,975,047
2019	\$ 35,701,014	\$ 3,987	\$ 35,705,001
2020	\$ 35,672,198	\$ 4,165	\$ 35,676,363
2021	\$ 35,159,837	\$ 29,789	\$ 35,189,626
2022	\$ 34,556,094	\$ -	\$ 34,556,094
2023	\$ 34,921,903	\$ 13,321	\$ 34,935,224

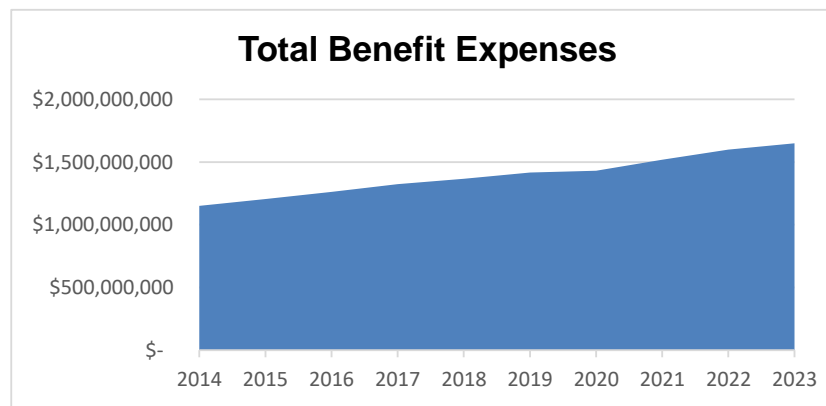
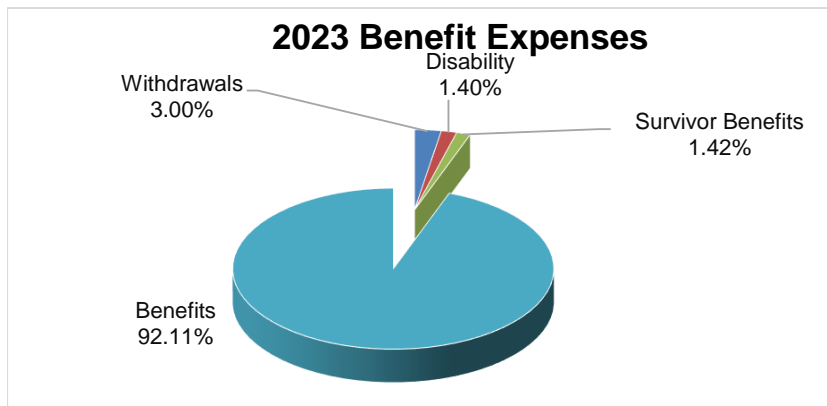
Information to present a 10-year history is not readily available.



Schedule of Benefit Expenses by Type - DB Plan

For Periods Ended June 30

Year	Age and Service Benefits	Disability Benefits	Survivor Benefits	Withdrawal of Accounts	Total
2014	\$ 1,088,077,119	\$ 19,310,123	\$ 15,527,726	\$ 28,718,256	\$ 1,151,633,224
2015	\$ 1,136,433,283	\$ 20,093,601	\$ 14,461,472	\$ 35,240,176	\$ 1,206,228,532
2016	\$ 1,189,645,360	\$ 20,731,886	\$ 16,377,208	\$ 36,109,832	\$ 1,262,864,286
2017	\$ 1,242,088,802	\$ 21,238,923	\$ 18,488,881	\$ 40,944,298	\$ 1,322,760,904
2018	\$ 1,281,644,941	\$ 21,617,912	\$ 20,649,418	\$ 42,940,983	\$ 1,366,853,254
2019	\$ 1,336,969,540	\$ 22,194,722	\$ 19,820,736	\$ 38,002,018	\$ 1,416,987,016
2020	\$ 1,352,066,625	\$ 22,023,290	\$ 22,168,815	\$ 35,183,705	\$ 1,431,442,435
2021	\$ 1,441,195,213	\$ 22,953,408	\$ 21,320,403	\$ 31,939,815	\$ 1,517,408,839
2022	\$ 1,508,097,257	\$ 23,112,637	\$ 28,472,136	\$ 38,398,988	\$ 1,598,081,018
2023	\$ 1,551,527,631	\$ 23,502,750	\$ 23,913,057	\$ 50,552,204	\$ 1,649,495,641

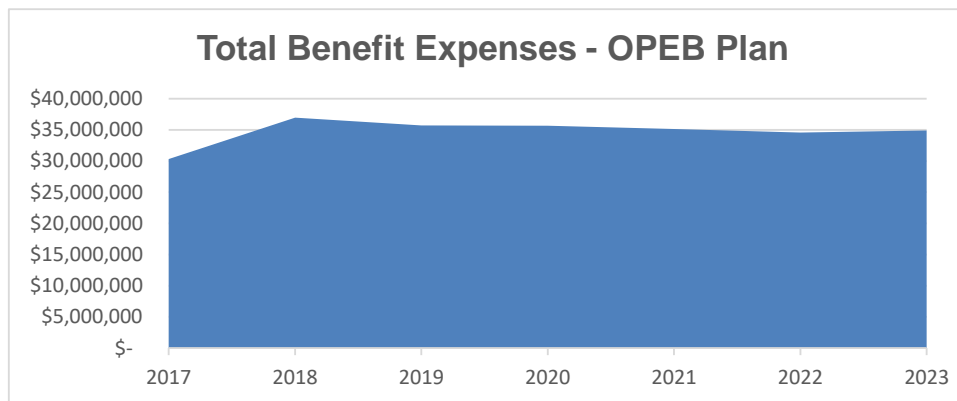
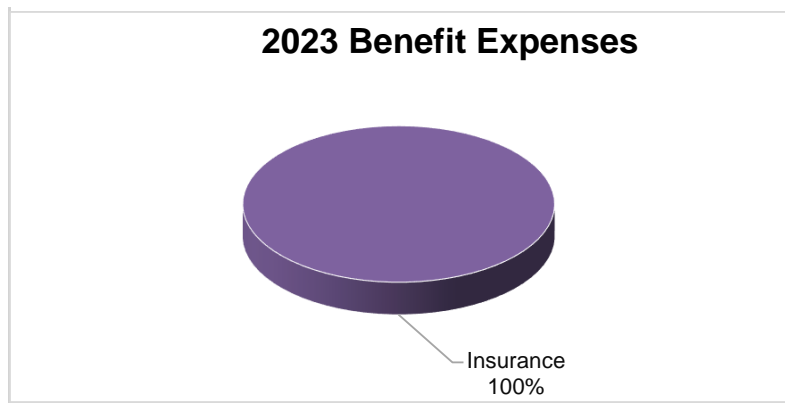


Schedule of Benefit Expenses by Type - OPEB Plan

For Periods Ended June 30

Year	Insurance Payments	Total
2017	\$ 30,309,127	\$ 30,309,127
2018	\$ 36,963,620	\$ 36,963,620
2019	\$ 35,701,014	\$ 35,701,014
2020	\$ 35,672,198	\$ 35,672,198
2021	\$ 35,159,837	\$ 35,159,837
2022	\$ 34,556,094	\$ 34,556,094
2023	\$ 34,921,903	\$ 34,921,903

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



Retirees in the State of Oklahoma by County

Of the 69,432 pensioners and beneficiaries in the Teachers' Retirement System of Oklahoma, 88% or 60,921 remain state of Oklahoma residents. As such, benefit payments of approximately \$1,418,176,210.28 this year alone went into the State's communities and businesses. Since money changes hands several times, the System's payments have a dramatic effect on the State's economy.

County	Recipients	Annual Payment	County	Recipients	Annual Payment
Adair	412	\$9,041,621.65	Le Flore	842	\$19,326,722.43
Alfalfa	111	\$2,803,780.61	Lincoln	530	\$11,362,884.80
Atoka	260	\$5,605,428.50	Logan	602	\$12,337,224.98
Beaver	96	\$2,161,488.37	Love	111	\$2,133,469.38
Beckham	344	\$7,882,683.06	Major	155	\$3,329,679.01
Blaine	187	\$4,363,487.43	Marshall	315	\$7,124,480.28
Bryan	897	\$20,828,933.48	Mayes	667	\$15,512,351.09
Caddo	645	\$14,185,591.97	Mcclain	819	\$17,614,046.21
Canadian	1,956	\$45,324,162.40	Mccurtain	637	\$13,188,063.09
Carter	776	\$16,289,070.63	Mcintosh	447	\$9,432,110.91
Cherokee	1,131	\$25,709,151.04	Murray	223	\$5,086,095.87
Choctaw	245	\$5,367,489.59	Muskogee	1,345	\$30,370,723.62
Cimarron	46	\$782,529.34	Noble	198	\$4,329,779.15
Cleveland	4,233	\$107,668,287.73	Nowata	118	\$2,467,805.19
Coal	101	\$2,151,796.05	Okfuskee	210	\$4,491,104.26
Comanche	1,772	\$41,249,916.75	Oklahoma	11,435	\$270,321,664.70
Cotton	111	\$2,372,955.16	Okmulgee	740	\$16,048,983.49
Craig	231	\$4,713,991.36	Osage	216	\$4,626,126.69
Creek	939	\$20,255,997.25	Ottawa	691	\$13,846,079.74
Custer	665	\$16,571,923.26	Pawnee	241	\$5,352,636.37
Delaware	521	\$12,121,527.73	Payne	2,480	\$64,216,267.27
Dewey	137	\$3,078,988.73	Pittsburg	744	\$17,020,690.32
Ellis	62	\$1,400,769.97	Pontotoc	926	\$21,075,812.57
Garfield	844	\$20,361,096.15	Pottawatomie	1,046	\$24,937,835.68
Garvin	468	\$10,423,268.65	Pushmataha	204	\$4,439,587.18
Grady	770	\$17,437,338.00	Roger Mills	86	\$2,257,917.59
Grant	92	\$2,175,439.49	Rogers	1,160	\$26,969,880.08
Greer	101	\$2,528,341.38	Seminole	405	\$9,012,085.89
Harmon	70	\$1,392,394.60	Sequoyah	725	\$15,973,800.66
Harper	77	\$1,658,578.57	Stephens	719	\$16,141,839.18
Haskell	259	\$5,927,462.82	Texas	227	\$4,819,246.19
Hughes	211	\$4,376,996.22	Tillman	134	\$3,014,050.68
Jackson	438	\$10,964,946.00	Tulsa	8,663	\$207,883,226.54
Jefferson	93	\$2,096,270.15	Wagoner	498	\$12,252,582.62
Johnston	275	\$6,086,978.54	Washington	667	\$13,431,220.63
Kay	686	\$14,876,537.58	Washita	222	\$5,106,380.42
Kingfisher	292	\$7,089,680.73	Woods	241	\$6,073,036.70
Kiowa	207	\$4,919,447.37	Woodward	266	\$6,536,138.97
Latimer	205	\$4,466,231.54			
			Total	60,921	\$1,418,176,210.28

2023 Participating Employers

Public School Districts

ACHILLE	BOKOSHE	CHOCTAW/NICOMA PARK	DURANT
ADA	BOONE-APACHE	CHOUTEAU-MAZIE	EAGLETOWN
ADAIR	BOSWELL	CIMARRON	EARLSBORO
AFTON	BOWLEGS	CLAREMORE	EDMOND
AGRA	BOWRING	CLAYTON	EL RENO
ALBION	BRAGGS	CLEORA	ELGIN
ALEX	BRAY-DOYLE	CLEVELAND	ELK CITY
ALINE CLEO	BRIDGE CREEK	CLINTON	ELMORE CITY
ALLEN	BRIGGS	COALGATE	EMPIRE
ALLEN-BOWDEN	BRISTOW	COLBERT	ENID
ALTUS	BROKEN ARROW	COLCORD	ERICK
ALVA	BROKEN BOW	COLEMAN	EUFAULA
AMBER-POCASSET	BRUSHY	COLLINSVILLE	FAIRLAND
ANADARKO	BUFFALO	COMANCHE	FAIRVIEW
ANDERSON	BUFFALO VALLEY	COMMERCE	FANSHAWE
ANTLERS	BURLINGTON	COPAN	FARGO
ARAPAHO-BUTLER	BURNS FLAT-DILL CITY	CORDELL	FELT
ARDMORE	BUTNER	COTTONWOOD	FLETCHER
ARKOMA	BYNG	COVINGTON-DOUG	FLOWER MOUND
ARNETT	CACHE	COWETA	FOREST GROVE
ASHER	CADDO	COYLE	FORGAN
ATOKA	CALERA	CRESCENT	FORT COBB-BROXTON
AVANT	CALUMET	CROOKED OAK	FORT GIBSON
BALKO	CALVIN	CROWDER	FORT SUPPLY
BANNER	CAMERON	CRUTCHO	FORT TOWSON
BARNSDALL	CANADIAN	CUSHING	FOX
BARTLESVILLE	CANEY	CYRIL	FOYIL
BATTIEST	CANEY VALLEY	DAHLONEGAH	FREDERICK
BEARDEN	CANTON	DALE	FREEDOM
BEAVER	CANUTE	DARLINGTON	FRIEND
BEGGS	CARNEGIE	DAVENPORT	FRINK-CHAMBERS
BELFONTE	CARNEY	DAVIDSON	FRONTIER
BENNINGTON	CASHION	DAVIS	GANS
BERRYHILL	CATOOSA	DEER CREEK	GARBER
BETHANY	CAVE SPRINGS	DEER CREEK-LAMONT	GEARY
BETHEL	CEMENT	DENISON	GERONIMO
BIG PASTURE	CENTRAL	DEPEW	GLENCOE
BILLINGS	CENTRAL HIGH	DEWAR	GLENPOOL
BINGER-ONEY	CHANDLER	DEWEY	GLOVER
BISHOP	CHATTANOOGA	DIBBLE	GOODWELL
BIXBY	CHECOTAH	DICKSON	GORE
BLACKWELL	CHELSEA	DOVER	GRACEMONT
BLAIR	CHEROKEE	DRUMMOND	GRAHAM-DUSTIN
BLANCHARD	CHEYENNE	DRUMRIGHT	GRAND VIEW
BLUEJACKET	CHICKASHA	DUKE	GRANDFIELD
BOISE CITY	CHISHOLM	DUNCAN	GRANDVIEW

2023 Participating Employers

Public School Districts (continued)

GRANITE	KENWOOD	MAUD	OILTON
GREENVILLE	KEOTA	MAYSVILLE	OKARCHE
GROVE	KETCHUM	MCALESTER	OKAY
GROVE	KEYS	MCCORD	OKEENE
GUTHRIE	KEYSTONE	MCCURTAIN	OKEMAH
GUYMON	KIEFER	MCLOUD	OKLAHOMA CITY
GYPSY	KILDARE	MEDFORD	OKLAHOMA UNION
HAILEYVILLE	KINGFISHER	MEEKER	OKMULGEE
HAMMON	KINGSTON	MERRITT	OKTAHA
HANNA	KINTA	MIAMI	OLIVE
HARDESTY	KIOWA	MID-DEL	OLUSTEE-ELDORADO
HARMONY	KONAWA	MIDDLEBERG	OOLOGAH TALALA
HARRAH	KREBS	MIDWAY	OPTIMA
HARTSHORNE	KREMLIN-HILLSDALE	MILBURN	OSAGE
HASKELL	LANE	MILL CREEK	OSAGE HILLS
HAWORTH	LATTA	MILLWOOD	OWASSO
HAYWOOD	LAVERNE	MINCO	PADEN
HEALDTON	LAWTON	MOFFETT	PANAMA
HEAVENER	LEACH	MONROE	PANOLA
HENNESSEY	LEEDEY	MOORE	PAOLI
HENRYETTA	LEFLORE	MOORELAND	PAULS VALLEY
HILLDALE	LEXINGTON	MORRIS	PAWHUSKA
HINTON	LIBERTY	MORRISON	PAWNEE
HOBART	LIBERTY	MOSELEY	PEAVINE
HODGEN	LINDSAY	MOSS	PECKHAM
HOLDENVILLE	LITTLE AXE	MOUNDS	PEGGS
HOLLIS	LOCUST GROVE	MOUNTAIN VIEW-GOTEBO	PERKINS TRYON
HOLLY CREEK	LOMEGA	MOYERS	PERRY
HOMINY	LONE GROVE	MULDROW	PIEDMONT
HOOKER	LONE STAR	MULHALL-ORLANDO	PIONEER
HOWE	LONE WOLF	MUSKOGEE	PIONEER-PLEASANT VALE
HUGO	LOOKEBA-SICKLES	MUSTANG	PITTSBURG
HULBERT	LOWREY	NASHOBA	PLAINVIEW
HYDRO-EAKLY	LUKFATA	NAVAJO	PLEASANT GROVE
IDABEL	LUTHER	NEW LIMA	POCOLA
INDIAHOMA	MACOMB	NEWCASTLE	PONCA CITY
INDIANOLA	MADILL	NEWKIRK	POND CREEK - HUNTER
INOLA	MANGUM	NINNEKAH	PORTER CONSOLIDATED
JAY	MANNFORD	NOBLE	PORUM
JENKS	MANNSVILLE	NORMAN	POTEAU
JENNINGS	MAPLE	NORTH ROCK CREEK IND	PRAGUE
JONES	MARBLE CITY	NORWOOD	PRESTON
JUSTICE	MARIETTA	NOWATA	PRETTY WATER
JUSTUS-TIAWAH	MARLOW	OAK GROVE	PRUE
KANSAS	MARYETTA	OAKDALE	PRYOR
KELLYVILLE	MASON	OAKS MISSION	PURCELL

2023 Participating Employers

Public School Districts (continued)

PUTNAM CITY	SHIDLER	THOMAS-FAY-CUSTER	WAURIKA
QUAPAW	SILO	TIMBERLAKE INDEPEN	WAYNE
QUINTON	SKIATOOK	TIPTON	WAYNOKA
RATTAN	SMITHVILLE	TISHOMINGO	WEATHERFORD
RAVIA	SNYDER	TONKAWA	WEBBERS FALLS
RED OAK	SOPER	TULSA	WELCH
REYDON	SOUTH COFFEYVILLE	TUPELO	WELEETKA
RINGLING	SOUTH ROCK CREEK	TURKEY FORD	WELLSTON
RINGWOOD	SPERRY	TURNER	WESTERN HEIGHTS
RIPLEY	SPIRO	TURPIN	WESTVILLE
RIVERSIDE	SPRINGER	TUSHKA	WETUMKA
ROBIN HILL	STERLING	TUSKAHOMA	WEWOKA
ROCK CREEK	STIDHAM	TUTTLE	WHITE OAK
ROCKY MOUNTAIN	STIGLER	TWIN HILLS	WHITE ROCK
ROFF	STILLWATER	TYRONE	WHITEBEAD
ROLAND	STILWELL	UNION	WHITEFIELD
RUSH SPRINGS	STONEWALL	UNION CITY	WHITESBORO
RYAL	STRAIGHT	VALLIANT	WICKLIFFE
RYAN	STRATFORD	VANOSS	WILBURTON
SALINA	STRINGTOWN	VARNUM	WILSON
SALLISAW	STROTHER	VELMA ALMA	WILSON
SAND SPRINGS	STROUD	VERDEN	WISTER
SAPULPA	STUART	VERDIGRIS	WOODALL
SASAKWA	SULPHUR	VIAN	WOODLAND
SAVANNA	SWEETWATER	VICI	WOODWARD
SAYRE	TAHLEQUAH	VINITA	WRIGHT CITY
SCHULTER	TALIHINA	WAGONER	WYANDOTTE
SEILING	TALOGA	WAINWRIGHT	WYNNEWOOD
SEMINOLE	TANNEHILL	WALTERS	WYNONA
SENTINEL	TECUMSEH	WANETTE	YALE
SEQUOYAH	TEMPLE	WAPANUCKA	YARBROUGH
SHADY GROVE	TENKILLER	WARNER	YUKON
SHADY POINT	TERRAL	WASHINGTON	ZANEIS
SHARON MUTUAL	TEXHOMA	WATONGA	ZION
SHATTUCK	THACKERVILLE	WATTS	
SHAWNEE	THE ACADEMY OF SEMINOLE	WAUKOMIS	

Career and Technology Centers

AUTRY	GORDON COOPER	METRO TECH	RED RIVER SCHOOL
CADDO-KIOWA	GREAT PLAINS	MID-AMERICA	SOUTHERN OKLAHOMA
CANADIAN VALLEY	GREEN COUNTRY	MOORE-NORMAN	SOUTHWEST
CENTRAL OKLAHOMA	HIGH PLAINS	NORTHEAST	TRI COUNTY
CHISHOLM TRAIL	INDIAN CAPITOL	NORTHWEST	TULSA
EASTERN OKLAHOMA CO	KIAMICHI	PIONEER	WES WATKINS
FRANCIS TUTTLE	MERIDIAN	PONTOTOC	WESTERN

2023 Participating Employers

Colleges and Universities

CAMERON UNIV	N OKLA COLLEGE	OU HEALTH SCIENCES	TULSA COMMUNITY COLL.
CARL ALBERT STATE COLL.	NE OKLA A&M COLLEGE	REDLANDS COMM. COLL.	UNIV CENTER AT PONCA CITY
CONNORS STATE COLL.	NE STATE UNIV	ROGERS STATE UNIV	UNIV OF CENTRAL OKLA
EAST CENTRAL STATE	NW OKLA STATE UNIV	ROSE STATE COLLEGE	UNIV OF OKLAHOMA
EASTERN OKLA STATE COLLEGE	OKC COMMUNITY COLLEGE	SE OKLA STATE UNIV	UNIV OF SCIENCES & ARTS
LANGSTON UNIV	OKLA PANHANDLE ST UNIV	SEMINOLE STATE COLLEGE	W OKLA STATE COLLEGE
MURRAY STATE COLLEGE	OKLA STATE UNIV	SW OKLA STATE UNIV	

Other Entities

BOARD OF PRIVATE VOC SCHOOLS	DEPT OF REHAB SERVICE	OFFICE OF EDUCATIONAL QUALITY AND ACCOUNTABILITY	STATEWIDE VIRTUAL CHARTER SCHOOL BOARD
BOARD OF REGENTS FOR HIGHER ED	EPIC CHARTER SCHOOL	OKLAHOMA SCHOOL OF SCIENCE & MATH	STREET SCHOOL
CAREER TECH	FIVE STAR INTERLOCAL	OKLA STUDENT LOAN AUTH	TEACHERS RETIREMENT SYSTEM
CARLTON LANDING ACADEMY	HARDING FINE ARTS CENTER	OKLAHOMA YOUTH ACADEMY CHARTER SCHOOL	TRI-COUNTY INTERLOCAL CO-OP
CHOCTAW NATION INTERLOCAL COOP	HARDING INDEPEN CHRTR DIST	OMES	TULSA SCHOOL OF ARTS & SCIENCES
COMANCHE ACADEMY SCHOOL	JOHN REX CHARTER ELEM SCHOOL	OSAGE COUNTY INTERLOCAL COOP	WESTERN GATEWAY
DEBORAH BROWN COMMUNITY SCHOOL	KIPP OKC COLLEGE PREP	QUARTZ MOUNTAIN	WESTERN VILLAGE CHARTER SCHOOL
DEPT OF CORRECTIONS	KIPP TULSA COLLEGE PREP	REGIONAL UNIVERSITY SYSTEM OF OKLAHOMA	
DEPT OF EDUCATION	LE MONDE INTERNATIONAL SCHOOL	SOVEREIGN COMMUNITY SCHOOL	