Tennessee Comptroller of the Treasury

Jason E. Mumpower
Comptroller

Independent Auditor's Report

Members of the General Assembly
Members of the Board of Trustees
The Honorable David H. Lillard, Jr., Treasurer

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying statement of fiduciary net position of the Tennessee Consolidated Retirement System, pension trust funds of the State of Tennessee, as of June 30, 2023, the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the Tennessee Consolidated Retirement System's basic financial statements.

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Tennessee Consolidated Retirement System as of June 30, 2023, and the changes in fiduciary net position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis of Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. 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 Tennessee Consolidated Retirement 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 opinion. Tennessee statutes, in addition to audit responsibilities, entrust certain other responsibilities to the Comptroller of the Treasury. Those responsibilities include serving as a member of the board of trustees of the Tennessee Consolidated

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Retirement System. We do not believe that the Comptroller's service in this capacity affected our ability to conduct an independent audit of the Tennessee Consolidated Retirement System.

Responsibilities of Management for the Financial Statements

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

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 Tennessee Consolidated Retirement 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 Responsibility 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 opinion.

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 and *Government Auditing Standards* 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 and *Government Auditing Standards*, 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 Tennessee Consolidated Retirement System's internal control. Accordingly, no such opinion is expressed.

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- 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 Tennessee Consolidated Retirement 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.

Emphasis of Matter

As discussed in Note A, the financial statements present only the Tennessee Consolidated Retirement System, pension trust funds, and do not purport to, and do not, present fairly the financial position of the State of Tennessee as of June 30, 2023, and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

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

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the basic financial statements as a whole. The accompanying schedule of administrative expenses, schedule of investment expenses, and schedule of expense for consultants is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was

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derived from, and relates directly to, the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 12, 2023, on our consideration of the Tennessee Consolidated Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, and contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Tennessee Consolidated Retirement System's internal control over financial reporting and compliance.

Katherine J. Stickel

Katherine J. Stickel, CPA, CGFM, Director
Division of State Audit
December 12, 2023

The management of the Tennessee Consolidated Retirement System (TCRS) provides this discussion and analysis as an overview of the TCRS' financial activities for the fiscal year ended June 30, 2023. This section should be read in conjunction with the Independent Auditor's Report, the audited financial statements, and the accompanying notes. The financial statements, notes and this discussion are the responsibility of management.

FINANCIAL HIGHLIGHTS

- The net position for the TCRS plans (total assets minus total liabilities) at June 30, 2023 was $64.7 billion, increasing $2.9 billion (4.7 percent) from the plan net position at June 30, 2022. The net position is restricted for future benefit obligations. This increase in plan net position is primarily the result of an increase in net investment income.

- Net investment income for fiscal year 2023 was 4.1 billion. During fiscal year 2023, the TCRS received a time-weighted rate of return on its portfolio of 6.66 percent, compared to a (3.63) percent loss for fiscal year 2022.

- Contribution revenue for fiscal year 2023 totaled $2.0 billion, representing an increase of 11.5 percent compared to fiscal year 2022.

- Total benefits and refunds paid for fiscal year 2023 were $3.2 billion, representing an increase of 4.9 percent over fiscal year 2022 total benefits and refunds paid of $3.0 billion. The growth is primarily due to the retiring members' benefits exceeding the benefits of long-term retired members whose benefits ceased due to death. Additionally, a 3 percent cost of living adjustment was given in July 2022.

- Total administrative expenses for fiscal year 2023 were $25.0 million, representing an increase of 12.4 percent from fiscal year 2022 administrative expenses of $22.2 million.

OVERVIEW OF THE FINANCIAL STATEMENTS

The TCRS financial statements consist of the *Statement of Fiduciary Net Position*, the *Statement of Changes in Fiduciary Net Position*, and the *Notes to the Financial Statements*. In addition, *Required Supplementary Information* and the *Notes to the Required Supplementary Information* are presented, which includes this *Management's Discussion and Analysis*. These financial statements, notes to the financial statements and required supplementary information were prepared in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans*. Collectively, this information presents the combined net position held in trust for pensions for each of the plans administered by TCRS as of June 30, 2023.

The *Statement of Fiduciary Net Position* and the *Statement of Changes in Fiduciary Net Position* report information about the fiduciary net position (total assets in excess of total liabilities) as of the end of the fiscal year and the changes in the fiduciary net position during the fiscal year. These statements include all assets and liabilities using the accrual basis of accounting. Under the accrual basis of accounting, the current year's revenues and expenses are included in the financial activity, regardless of when cash is received or paid. The difference between the total assets and total liabilities on the *Statement of Fiduciary Net Position*, or net position restricted for pensions, provides a measurement of the financial position of the TCRS as of the end of the fiscal year. The *Statement of Changes in Fiduciary Net Position* provides information on the activities that caused the financial position to change during the fiscal year. Over time, increases or decreases in the fiduciary net position of the TCRS are one indicator of whether the system's financial health is improving or deteriorating.

The *Notes to the Financial Statements* are essential to the reader's understanding of the financial statements and provide additional information regarding the TCRS, such as descriptions of the plans administered by the TCRS, including contribution and benefit provisions, and information about the accounting policies and investment activities.

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ANALYSIS OF ASSETS, LIABILITIES AND PLAN NET POSITION

At June 30, 2023, the TCRS had a net position (total assets in excess of total liabilities) of $64.7 billion, an increase of $2.9 billion (4.7 percent) from $61.8 billion at June 30, 2022. The assets of the TCRS consist primarily of investments. Condensed financial information comparing the TCRS' fiduciary net position for the past two fiscal years follows.

FIDUCIARY NET POSITION

	June 30, 2023	June 30, 2022	Increase (Decrease) Amount	Percentage Change
ASSETS				
Cash and cash equivalents	$ 24,515,203	$ 24,710,006	$ (194,803)	(0.8) %
Cash collateral for securities on loan	3,123,507,286	3,304,996,382	(181,489,096)	(5.5) %
Member and employer receivables	121,706,485	118,862,186	2,844,299	2.4 %
Investments	64,544,117,978	61,631,108,711	2,913,009,267	4.7 %
Capital assets	2,509,852	5,793,693	(3,283,841)	(56.7) %
TOTAL ASSETS	67,816,356,804	65,085,470,978	2,730,885,826	4.2 %
LIABILITIES				
Death benefits, refunds and other payables	30,863,552	32,595,652	(1,732,100)	(5.3) %
Cash collateral for securities on loan	3,123,507,286	3,304,996,382	(181,489,096)	(5.5)%
TOTAL LIABILITIES	3,154,370,838	3,337,592,034	(183,221,196)	(5.5) %
NET POSITION RESTRICTED FOR PENSIONS	$ 64,661,985,966	$ 61,747,878,944	$ 2,914,107,022	4.7 %

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ANALYSIS OF REVENUES AND EXPENSES

Contribution rates for fiscal year 2023 remained steady with the exception of an extraordinary contribution of $350 million authorized by the General Assembly to the State Legacy Plan. A significant change in the investment markets resulted in growth of the fund for fiscal year 2023. Gross investment income for fiscal year 2023 increased $6.6 billion (270.9 percent) from fiscal year 2022.

Investment expenses for fiscal year 2023 totaled $206 million for a 177.4 percent increase over fiscal year 2022 investment expenses of $74 million. These expenses were split between portfolio management investment expenses of $63 million and $142 million in expenses attributed to the securities lending program. The increase in investment expense is mainly attributable to higher interest rates which directly affect the expenses for the securities lending program. The TCRS investment portfolio realized a time-weighted rate of return of 6.66 percent and net investment income of $4.1 billion.

Total benefits paid during the year ended June 30, 2023 were $3.1 billion, an increase of 5.4 percent over fiscal year 2022 total benefits which can be attributed to an increase in the number of retirees and a 3 percent cost of living adjustment given in July 2022. Total refunds paid decreased $7.5 million, a decrease of 13.5 percent, in fiscal year 2023 from fiscal year 2022, likely because of a stabilizing work force post-pandemic.

Administrative expenses for the year ended June 30, 2023 were $25.0 million, an increase of 12.4 percent from fiscal year 2022 administrative expenses. The increase in administrative costs can be primarily attributed to increased expenses for information system services.

Condensed financial information comparing the TCRS' revenues and expenses for the past two fiscal years follows.

Revenue by Type

Expressed in Thousands

	Year ended June 30, 2023		Year ended June 30, 2022	
	Amount	% of Total	Amount	% of Total
Employee Contributions	$ 474,413	7.8%	$ 433,122	-63.0%
Employer Contributions	1,525,030	25.0%	1,358,967	-197.6%
Other Contributions	906	0.0%	1,327	-0.2%
Net Investment Income (Loss)	4,110,624	67.2%	(2,481,223)	360.8%
Total	$ 6,110,973	100.0%	$ (687,807)	100.0%

Expenses by Type

Expressed in Thousands

	Year ended June 30, 2022		Year ended June 30, 2021	
	Amount	% of Total	Amount	% of Total
Benefit Payments	$ 3,123,960	97.7%	$ 2,967,492	97.5%
Refunds	47,882	1.5%	55,349	1.8%
Administrative	25,024	0.8%	22,263	0.7%
Total	$ 3,196,866	100.0%	$ 3,045,104	100.0%

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TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
CHANGES IN FIDUCIARY NET POSITION

	For the Year Ended June 30, 2023	For the Year Ended June 30, 2022	FY23 - FY22 Increase (Decrease) Amount	FY23 - FY22 Percentage Change
ADDITIONS				
Contributions	$ 2,000,348,959	$ 1,793,415,962	$ 206,932,997	11.5%
Investment income (loss)	4,154,791,281	(2,430,765,942)	6,585,557,223	270.9%
Less: Investment expense	(63,311,236)	(68,115,497)	(4,804,261)	(7.1)%
Net income from securities lending activities	19,145,504	17,658,960	1,486,544	8.4%
Net investment income (loss)	4,110,625,549	(2,481,222,479)	6,591,848,028	265.7%
TOTAL ADDITIONS (DEDUCTIONS)	6,110,974,508	(687,806,517)	6,798,781,025	988.5%
DEDUCTIONS				
Annuity benefits	3,120,176,496	2,960,551,325	159,625,171	5.4%
Death benefits	3,783,981	6,940,392	(3,156,411)	(45.5)%
Refunds	47,882,314	55,349,050	(7,466,736)	(13.5)%
Administrative expenses	25,024,695	22,263,337	2,761,358	12.4%
TOTAL DEDUCTIONS	3,196,867,486	3,045,104,104	151,763,382	5.0%
NET INCREASE (DECREASE)	2,914,107,022	(3,732,910,621)	6,647,017,643	178.1%
NET POSITION RESTRICTED FOR PENSIONS				
BEGINNING OF YEAR	61,747,878,944	65,480,789,565	(3,732,910,621)	(5.7)%
END OF YEAR	$ 64,661,985,966	$ 61,747,878,944	$ 2,914,107,022	4.7%

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ECONOMIC FACTORS, FUTURE FUNDING PROVISIONS, OVERALL OUTLOOK

For the year ended June 30, 2023, the portfolio delivered a return of 6.66 percent which was close to the actuarial assumed return of 6.75 percent. The fund gained 8.89 percent for the trailing three-year period and 8.08 percent for the trailing ten-year period. According to the Verus performance benchmark, the fund trailed 75 percent of its peers for the current year and beat 61 percent and 75 percent for the trailing three and ten-year periods respectively.

Public equity markets performed very well during the fiscal year while public fixed income struggled. Alternative assets had tepid returns. Developed international equities led for the year and rose 19.47 percent and U.S. Equity portfolio rose 18.79 percent. Fixed Income lagged with a drop of 2.75 percent which was the result of rising interest rates. Real Estate and Private Equity had slightly negative returns (-4.07 percent and -3.42 percent respectively) while Strategic Lending performed well with a return of 8.14 percent.

An actuarial valuation was performed as of June 30, 2021 that determined the employer contribution rates for the period July 1, 2022 through June 30, 2023. An actuarial experience study to establish demographic and economic assumptions was completed effective June 30, 2020, was adopted by the Board of Trustees during fiscal year 2021 and was utilized in actuarial valuations dated June 30, 2021 and later.

CONTACTING THE TCRS

This report is designed to provide a financial overview of the TCRS to state legislators, members of the Board of Trustees of the TCRS, state officials, participating employers, members of the TCRS and any other interested parties. Questions or requests for additional information regarding the financial information presented in this report may be addressed in writing to the Tennessee Treasury Department, Consolidated Retirement System, 502 Deaderick Street, Nashville, TN 37243-0201.

STATEMENT OF FIDUCIARY NET POSITION
AS OF JUNE 30, 2023

Expressed in Thousands

	Public Employee Retirement Plan	Teacher Legacy Pension Plan	Teacher Retirement Plan	Total
ASSETS				
Cash and cash equivalents	$ 12,844	$ 11,336	$ 335	$ 24,515
Cash collateral for securities on loan	1,636,466	1,444,388	42,653	3,123,507
Receivables				
Employer receivable	48,559	27,452	5,469	81,480
Member receivable	14,104	16,427	9,696	40,227
Total receivables	62,663	43,879	15,165	121,707
Investment in Tennessee Retiree Group Trust	33,815,917	29,846,816	881,385	64,544,118
Capital assets (net)	1,315	1,161	34	2,510
TOTAL ASSETS	35,529,205	31,347,580	939,572	67,816,357
LIABILITIES				
Accounts payable				
Death benefits and refunds payable	741	654	19	1,414
Federal withholding payable	10,106	8,920	263	19,289
Retiree insurance premium payable	5,323	4,699	139	10,161
Cash collateral for securities on loan	1,636,466	1,444,388	42,653	3,123,507
TOTAL LIABILITIES	1,652,636	1,458,661	43,074	3,154,371
NET POSITION RESTRICTED FOR PENSIONS	$ 33,876,569	$ 29,888,919	$ 896,498	$ 64,661,986

See accompanying Notes to the Financial Statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED JUNE 30, 2023

Expressed in Thousands

	Public Employee Retirement Plan	Teacher Legacy Pension Plan	Teacher Retirement Plan	Total
ADDITIONS				
Contributions				
Employer contributions	$ 1,186,096	$ 281,850	$ 57,084	$ 1,525,030
Member contributions	211,513	163,017	99,883	474,413
Other contributions	906	0	0	906
Total contributions	1,398,515	444,867	156,967	2,000,349
Investment income (loss)	2,167,462	1,934,988	52,341	4,154,791
Less: Investment expense	(33,028)	(29,486)	(797)	(63,311)
Net income (loss) from investing activities	2,134,434	1,905,502	51,544	4,091,480
Securities lending activities				
Securities lending income	84,221	75,188	2,034	161,443
Less: Securities lending expense	(74,234)	(66,272)	(1,793)	(142,299)
Net income from securities lending activities	9,987	8,916	241	19,144
Net investment income (loss)	2,144,421	1,914,418	51,785	4,110,624
TOTAL ADDITIONS	3,542,936	2,359,285	208,752	6,110,973
DEDUCTIONS				
Annuity benefits	1,687,035	1,432,684	457	3,120,176
Death benefits	2,000	1,706	78	3,784
Refunds	26,960	15,238	5,684	47,882
Administrative expense	16,270	6,512	2,242	25,024
TOTAL DEDUCTIONS	1,732,265	1,456,140	8,461	3,196,866
NET INCREASE (DECREASE)	1,810,671	903,145	200,291	2,914,107
FIDUCIARY NET POSITION RESTRICTED FOR PENSIONS				
BEGINNING OF YEAR	32,065,898	28,985,774	696,207	61,747,879
END OF YEAR	$ 33,876,569	$ 29,888,919	$ 896,498	$ 64,661,986

See accompanying Notes to the Financial Statements.

The Tennessee Consolidated Retirement System (TCRS) is a public employee retirement system comprised of defined benefit pension plans covering Tennessee state employees, employees of the state's higher education systems, teachers, and employees of political subdivisions in Tennessee. The TCRS was established in 1972 by a statutory enactment of the Tennessee General Assembly. The provisions of the TCRS are codified in *Tennessee Code Annotated* Title 8, Chapters 34-37. In accordance with *Tennessee Code Annotated* Title 8, Chapter 34, Section 202, all funds invested, securities, cash, and other property of the TCRS are held in trust and can be expended only for the purposes of the trust. Although the assets for all pension plans within the TCRS are commingled for investment purposes, the assets of each separate plan may legally be used only for the payment of benefits to the members of that plan and for its administration, in accordance with the terms of the plan.

A: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting entity: The TCRS is included in the State of Tennessee financial reporting entity as a discretely presented component unit. The state appoints the majority of the TCRS Board of Trustees, its governing body, and approves its operating budget. The TCRS is presented as such in the *Tennessee Annual Comprehensive Financial Report*. That report is available on the state's website at https://www.tn.gov/finance/rd-doa/fa-accfin-ar.html.

Measurement focus and basis of accounting: The accompanying financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB). The financial statements have been prepared using the flow of economic resources measurement focus and the accrual basis of accounting. Under the accrual method, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred regardless of the timing of related cash flows.

Plan member and employer contributions are recognized in the period of time for which they are due, in accordance with legal provisions. Benefits and refunds are recognized when due and payable in accordance with the terms of each plan.

Cash and cash equivalents: Cash and cash equivalents includes cash, cash management pools, and cash invested in a short-term, open-end mutual fund under the contractual arrangement for master custody services. Cash received by the TCRS, that cannot be invested immediately in securities or is needed for operations, is invested in the State Pooled Investment Fund sponsored by the State of Tennessee and administered by the State Treasurer. That report is available on the state's website at https://treasury.tn.gov.

Method used to value investments: Assets of the TCRS are invested in the Tennessee Retiree Group Trust (TRGT). A report of TRGT is available on the state's website at https://treasury.tn.gov. As of June 30, 2023, the TCRS owns 99 percent of the net asset value in the TRGT. The TRGT is not registered with the Securities and Exchange Commission (SEC) as an investment company. The State of Tennessee has not obtained a credit quality rating for the TRGT from a nationally recognized credit ratings agency. The fair value of investment positions in the TRGT is determined daily based on the fair value of the pool's underlying portfolio. Furthermore, the State had not obtained or provided any legally binding guarantees to support the value of participant shares during the fiscal year. There are no restrictions on the sale or redemption of shares.

Investments are reported at fair value. Securities traded on a national exchange are valued at the last reported sales price. Investment income consists of realized and unrealized appreciation (depreciation) in the fair value of investments and interest and dividend income. Interest income is recognized when earned. Securities and securities transactions are recorded in the financial statements on trade-date basis.

The fair value of assets of the TRGT held at June 30, 2023 represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. Assets held are categorized for

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fair value measurement within the fair value hierarchy established by GAAP. 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).

- Level 1 - Unadjusted quoted prices for identical assets or liabilities in active markets that can be accessed at the measurement date.

- Level 2 - Quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; assets or liabilities that have a bid-ask spread price in an inactive dealer market, brokered market and principal-to-principal market; and Level 1 assets or liabilities that are adjusted.

- Level 3 - Valuations derived from valuation techniques in which significant inputs are unobservable.

Investments where fair value is measured using the Net Asset Value ("NAV") per share have no readily determinable fair value and have been determined to be calculated consistent with FASB principles for investment companies.

Where inputs used in the measurement of fair value fall into different levels of the hierarchy, fair value of the instrument in its entirety are categorized based on the lowest level input that is significant to the valuation. This assessment requires professional judgement and as such management developed a fair value committee that worked in conjunction with our custodian and investment professionals to make these valuations. All assets held were valued individually and aggregated into classes so to be represented in the table below.

Short-term securities generally include investments in money market-type securities reported at cost plus accrued interest.

Equity and equity derivative securities classified in Level 1 are valued using last reported sales prices quoted in active markets that can be accessed at the measurement date. Equity and equity derivative securities classified in Level 2 are securities whose values are derived daily from associated traded securities. Equity securities classified in Level 3 are valued with last trade data having limited trading volume.

US Treasury Bills, Bonds, Notes and Futures classified in Level 1 are valued using last reported sales prices quoted in active markets that can be accessed at the measurement date. Debt and debt derivative securities classified in Level 2 are valued using a bid-ask spread price from multiple independent brokers, dealers, or market principals, which are known to be actively involved in the market. Level 3 debt securities are valued using proprietary information, a single pricing source, or other unobservable inputs related to similar assets or liabilities.

Real estate investments classified in Level 3 are valued using the last valuations provided by external investment advisors or independent external appraisers. Generally, all direct real estate investments are appraised by a qualified independent appraiser(s) with the professional designation of Member of the Appraisal Institute ("MAI"), or its equivalent, every three (3) years beginning from the acquisition date of the property. The appraisals are performed using generally accepted valuation approaches applicable to the property type.

Investments in private mutual funds, traditional private equity funds, strategic lending funds and real estate funds that report using GAAP, the fair value, as well as the unfunded commitments, was determined using the prior quarter's NAV, as reported by the fund managers, plus the current cash flows. These assets were then categorized by investment strategy. In instances where the fund investment reported using non-GAAP standards, the investment was valued using the same method, but was classified in Level 3.

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INVESTMENTS MEASURED AT FAIR VALUE

As of June 30, 2023

Expressed in Thousands

Investments at Fair Value Level	**GAAP Hierarchy Level 1**	**GAAP Hierarchy Level 2**	**GAAP Hierarchy Level 3**	**NAV**	**Total Investments**
Government Agencies		$ 87,440	$ 1,256		$ 88,696
Government Bonds	$ 3,601,719	29,528			3,631,247
Government Inflation Indexed	5,748				5,748
Government Mortgage Backed		3,665,989	48,533		3,714,522
Government Asset Backed		71,086			71,086
Municipal Bonds		17,371	5,888		23,259
Commercial Mortgage Backed		13,191	249,793		262,984
Corporate Asset Backed Securities		73,069	857,506		930,575
Corporate Bonds		4,127,657	79,028		4,206,685
Corporate Equities	28,794,463		41,316		28,835,779
Preferred Stocks	64,931	14,168	43,356		122,455
Limited Partnership Units			1,432,692	$ 13,710,738	15,143,430
Real Estate			3,750,537	3,425,435	7,175,972
Derivatives		777			777
TOTAL TRGT INVESTMENTS AT FAIR VALUE	$ 32,466,861	$ 8,100,276	$ 6,509,905	$ 17,136,173	$ 64,213,215
Cash and Cash Equivalents					874,142
Cash Collateral on Loaned Securities					3,154,310
Investment Income Receivable					148,359
Derivatives Receivable					113,604
Investments Sold					189,854
TOTAL ASSETS OF TRGT					$ 68,693,484

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The following table sets forth the additional disclosures of the TRGT's investments, which are stated at fair value based on the net asset value "NAV" (expressed in thousands), as a practical expedient, reported by the investment managers or general partners:

Asset Classification	Strategy	Number of Funds	NAV	Remaining Life	Redemption Terms	Redemption Restrictions
Limited Partnerships	Traditional Private Equity and Strategic Lending	167	$13,710,738	Various	N/A	Various transfer and sale restrictions
Real Estate	Real Estate Commingled Investments	43	$3,425,434	N/A	N/A	Various transfer and sale restrictions

Traditional Private Equity and Strategic Lending: The private equity asset class is categorized into two component portfolios: traditional and strategic lending. Generally speaking, the types of private equity strategies include venture capital, buyout, natural resource, secondary, special situations, tactical, structured credit, and high yield debt. The majority of these investments have an approximate life of 10 years or greater and are considered illiquid. During the life of the partnerships, distributions are received as underlying partnership investments are realized. Transfer or sale of the partnership interest are restricted over the life of the partnership. The TRGT has no plans to liquidate any of these investments.

Real Estate Commingled Investments: The real estate asset class is comprised of two different investment types: direct investments and commingled investments. A commingled investment is a pooled investment vehicle comprised of real estate investments that is overseen by an external investment manager or general partner. Generally speaking, the commingled real estate investment strategies include office, retail, industrial, multi-family, and diversified. The majority of these investments have an approximate life of 10 years or greater and are considered illiquid. During the life of the pooled investment vehicle, distributions are received as underlying investments are realized. Transfer or sale of the interest are restricted over the life of the investment. The TRGT has no plans to liquidate any of these investments.

Capital assets: Capital assets consist of internally generated computer software, reported at historical cost less any applicable amortization. Capital assets are defined by the state as assets with an initial individual cost of $5,000 or more and an estimated useful life in excess of two years. The computer software was valued at $2.5 million at year end and is being amortized using the straight-line method over the ten-year estimated life of the system. The amortization expense for the current year was $3.3 million.

(continued)

B: PLAN DESCRIPTIONS

***Plan administration*:** The Tennessee Treasury Department, an agency in the legislative branch of state government, administers the plans of the TCRS.

At June 30, 2023, there were three defined benefit pension plans within the TCRS. The Public Employee Retirement Plan is an agent, multiple employer defined benefit pension plan for state government employees and for political subdivisions electing to participate in the TCRS. The Teacher Legacy Pension Plan is a cost-sharing, multiple-employer defined benefit pension plan for teachers of local education agencies (LEAs). The Teacher Legacy Pension Plan closed to new membership on June 30, 2014 but will continue providing benefits to existing members and retirees. Beginning July 1, 2014, the Teacher Retirement Plan became effective for teachers employed by LEAs after June 30, 2014. The Teacher Retirement Plan is a separate cost sharing, multiple employer defined benefit pension plan.

The general administration and responsibility for proper operation of the TCRS plans are vested in a 20-member Board of Trustees, consisting of 18 voting members and two non-voting members. The Board has nine ex-officio members, two of whom are non-voting. The seven voting ex-officio members are the State Treasurer, Secretary of State, Comptroller of the Treasury, Commissioner of Finance and Administration, Commissioner of Human Resources, Director of the TCRS, and the Administrative Director of the Courts. The two non-voting ex-officio members are the chair and vice-chair of the Legislative Council on Pensions.

Three active teacher members, one from each grand division of the state, and a retired teacher member are selected for three-year terms by the Speaker of the House of Representatives and the Speaker of the Senate. Two active state employee members, who are from departments other than those represented by ex-officio members, are elected by state employees for three-year terms. A board member is appointed for a two-year term by each of the following organizations: Tennessee County Services, Tennessee Municipal League, and the Tennessee County Officials Association. Two members, a public safety employee and a retired state employee, are appointed by the Governor for two-year terms. All members must be vested members of the TCRS, except for ex-officio members.

Plan membership: At June 30, 2023, the membership of the pension plans consisted of the following:

	Public Employee Retirement Plan	Teacher Legacy Pension Plan	Teacher Retirement Plan	Total
Inactive Plan Members or Beneficiaries Currently Receiving Benefits	123,344	55,568	198	179,110
Inactive Employees Entitled to But Not Yet Receiving Benefits	167,140	30,202	18,079	215,421
Active Plan Members	148,050	45,431	36,339	229,820
Total Membership	438,534	131,201	54,616	624,351
Number of participating employers	651	213	213	

Membership above includes all plans whether open or closed.

(continued)

Benefits provided: The TCRS provides retirement, disability, and death benefits. The benefits of the TCRS are established by state law (*Tennessee Code Annotated* Title 8, Chapters 34-37). In general, the benefits may be amended prospectively by the General Assembly for employees becoming members of the TCRS after June 30, 2014. Amendments of benefits for employees becoming members before July 1, 2014 can be restricted by precedent established by the Tennessee Supreme Court.

Teacher Legacy Pension Plan

Members of the Teacher Legacy Pension Plan are eligible to retire at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. Plan members are entitled to receive unreduced service retirement benefits, which are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Service-related disability benefits are provided regardless of length of service. Five years of service is required for non-service-related disability eligibility. The service related and non-service-related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. Member and beneficiary annuitants are entitled to automatic cost of living adjustments (COLAs) after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the consumer price index (CPI) during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent.

Teacher Retirement Plan

Members of the Teacher Retirement Plan are eligible to retire at age 65 with 5 years of service credit or pursuant to the rule of 90 where age and years of service total 90. Plan members are entitled to receive unreduced service retirement benefits, which are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Service-related disability benefits are provided regardless of length of service. Five years of service is required for non-service-related disability eligibility. The service related and non-service-related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. Member and beneficiary annuitants are entitled to automatic cost of living adjustments (COLAs) after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the consumer price index (CPI) during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. The Teacher Retirement Plan includes provisions to control employer contributions and unfunded liabilities. As such, plan provisions are automatically changed when employer contributions and unfunded liabilities exceed statutory limits.

Public Employee Retirement Plan

For state employees, there are two major tiers of benefits and eligibility requirements. State employees becoming members before July 1, 2014 are eligible to retire at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. State employees becoming members after June 30, 2014 are eligible to retire at age 65 with five years of service or pursuant to the rule of 90 where age and years of service total 90. Plan members are entitled to receive unreduced service retirement benefits, which are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Service-related disability benefits are provided regardless of length of service. Five years of service is required for non-service-related disability eligibility. The service related and non-service-related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. Member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year.

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The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. There are additional classes of employees that include state judges, elected members of the general assembly, and public safety officers which have different benefit structures and eligibility requirements. These classifications represent an immaterial percentage of the state employee membership.

For political subdivision employees, there are various tiers of benefits and eligibility requirements. Each political subdivision adopts the benefit structure that the entity provides to its employees. Unreduced service retirement benefits are determined using a multiplier of the member's highest 5 consecutive year average compensation multiplied by the member's years of service credit. Plan members are eligible for service-related disability benefits regardless of length of service. Five years of service is required for non-service-related disability eligibility. The service related and non-service-related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria. If adopted as a benefit provision by the political subdivision, member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. There are additional classes of employees, local judges, elected officials, and public safety officers, which may have different benefit structures and eligibility requirements. These classifications represent an immaterial percentage of the political subdivisions' membership.

Contributions: Pursuant to *Tennessee Code Annotated* Title 8, Chapter 37, the Board of Trustees adopted an actuarially determined contribution (ADC) for each participating employer, as recommended by an independent actuary following an actuarial valuation.

For the Teacher Legacy Pension Plan, LEAs are required by statute to contribute the ADC. The ADC is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, the unfunded accrued liability, and the cost of administration. Teachers are required by statute to contribute 5 percent of salary. For the year ended June 30, 2023, the required ADC for LEAs was 8.69 percent of covered payroll.

For the Teacher Retirement Plan, LEAs are required by statute to contribute the greater of the ADC or 4 percent. The ADC is the estimated amount necessary to finance the costs of benefits earned by plan members during the year, the unfunded accrued liability, and the cost of administration. Teachers are required by statute to contribute 5 percent of salary. For the year ended June 30, 2023, the required ADC for LEAs was 2.87 percent of covered payroll while actual contributions were 4 percent of covered payroll.

For the Public Employee Retirement Plan, each governmental entity is required by statute to contribute the ADC except that the contribution rate for state employees hired after June 30, 2014 is the greater of the ADC or 4 percent. The ADC is the estimated amount necessary to finance the costs of benefits earned by plan members during the plan year, the unfunded accrued liability, and the cost of administration. For the year ended June 30, 2023, the required ADC varied for each participating employer, with approximately ninety-six percent of all employer rates less than twenty (20) percent. By statute, state employees hired before July 1, 2014 are noncontributory while employees hired after June 30, 2014 contribute 5 percent of salary. As adopted by the governmental entity, political subdivision employees may be noncontributory, contribute 2.5 percent of salary, or contribute 5 percent of salary.

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Reserves: The statute governing the Teacher Retirement Plan and certain employers in the Public Employee Retirement Plan provide for a minimum employer contribution rate of 4 percent. The statute further provides that the amount of the employer contributions in excess of the actuarially determined contribution rate is deposited into a stabilization reserve for each plan. The statute may be amended by the Tennessee General Assembly. Assets in the stabilization reserve are commingled for investment purposes and receive a pro rata share of investment earnings. The amount in the stabilization reserve is not considered in calculating the actuarially determined employer contribution rate for each plan. The statute provides that the assets in the stabilization reserve will be utilized should the actuarially determined contribution rate exceed 4 percent. In such case, the required employer contribution in excess of 4 percent will be transferred from the stabilization reserve to the account of the Teachers Retirement Plan or certain Public Employee Retirement Plan employers. By statute, the Board of Trustees may adopt a policy to suspend the deposits into the stabilization reserve in any given year when the stabilization reserve reaches a certain level that is determined by the Board. If deposits are suspended, then the employer contribution will be the actuarially determined contribution rate for that year rather than the higher 4 percent. The Board has not adopted a policy at this time.

From July 1, 2014, through June 30, 2018, the funds contributed to the stabilization reserves were held by TCRS in the pension trust fund. As of June 30, 2023, there was $75,082,566 in the stabilization reserve on behalf of the Teachers Retirement Plan and $69,019,820 in the various stabilization reserves on behalf of the Public Employee Retirement Plan held by TCRS. Effective July 1, 2018, all future stabilization reserve contributions are held in a separate trust outside of TCRS for the benefit of each employer that participates in the stabilization reserve trust. The amounts reflected in the Stabilization Reserve Trust can only be moved to the entity's pension trust at the direction of the entity (employer) with the approval of the Board of Trustees of the Pension Stabilization Reserve Trusts.

C: DEPOSITS AND INVESTMENTS

Statutory Authority: The Tennessee Retiree Group Trust (TRGT) was established in 2015 by a statutory enactment of the Tennessee General Assembly. The provisions of the TRGT are codified in *Tennessee Code Annotated* (TCA) Title 8, Chapters 34-37. Pursuant to this statute the Tennessee Consolidated Retirement System (TCRS) and its board of directors with the State Treasurer (Treasurer) as custodian, authorized by TCA 8-37-104 adopted this group trust for the purpose of pooling funds of TRGT with other assets in the custody of the Treasurer, solely for investment purposes. The assets invested consist exclusively of assets of exempt pension and profit-sharing trusts and individual retirement accounts, custodial accounts, retirement income accounts, governmental plans and tax-exempt trusts under the Internal Revenue Code of 1986 and Rev. Rul. 81-100, as modified by Rev. Ruls. 2004-67, 2008-40 and 2011-1 (referred to herein as "Retirement Assets"). The Custodian shall be responsible for the managing and directing the investment of the Group Trust Funds in the same manner as it invests funds of the TCRS.

The TRGT is authorized to invest in securities in accordance with the investment policy of the TCRS. That policy allows the Trust to invest in bonds, debentures, preferred stock and common stock, real estate and in other good and solvent securities subject to the approval of the Board of Trustees, but further subject to the following statutory restrictions and provisions:

a. The total sum invested in common and preferred stocks shall not exceed seventy-five percent (75 percent) of the total of the funds of the trust.

b. The total sum invested in notes and bonds or other fixed income securities exceeding one year in maturity shall not exceed seventy-five percent (75 percent) of the total funds of the trust.

(continued)

c. Within the restrictions in (a) and (b) above, fifteen percent (15 percent) of the total of the funds of the retirement system may be invested in securities of the same kinds, classes, and investment grades as those otherwise eligible for investment in various approved foreign countries. However, upon action of the TCRS Board of Trustees with subsequent approval by the Council on Pensions, limit has been authorized at an amount not to exceed twenty-five percent (25 percent).

d. Within the restrictions in (a) and (b) above, funds may be invested in Canadian securities which are substantially of the same kinds, classes and investment grades as those otherwise eligible for investment.

e. The total amount of securities loaned under a securities lending program cannot exceed thirty percent (30 percent) of total assets.

f. The total sum invested in alternative assets shall not exceed forty percent (40 percent) of the fair value of total assets.

State statute also authorizes the TRGT to invest in forward contracts to hedge its foreign currency exposure and to purchase or sell domestic equity index futures contracts for the purpose of asset allocation relating to the domestic equity portfolio. The total amount of the financial futures contract obligation shall not exceed ten percent (10 percent) of the fair value of the TRGT's total assets. Position sizes will be measured by notional amounts. Options will be measured in their notional equivalents.

Investment policy: The TRGT investment authority is established pursuant to *Tennessee Code Annotated* Title 8, Chapter 37. The statute provides the Board of Trustees with the responsibility to establish the investment policy of the TRGT. The investment policy may be amended by the Board. The TRGT assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided by the TCRS. The following was the Board's adopted asset allocation policy as of June 30, 2023:

Portfolio	Strategic Target
Equity – United States	31%
Equity – Canadian	2%
Equity – International Developed Markets	12%
Equity – Emerging Markets	4%
Core Fixed Income Securities	20%
Private Equity – Traditional	10%
Private Equity – Strategic Lending	10%
Real Estate	10%
Cash and Cash Equivalents	1%
TOTAL	100%

Securities Lending: The TRGT is authorized to engage in securities lending agreements by TCA 8-37-104(a)(6) with the terms established in the investment policy whereby TRGT loans securities to brokers and dealers (borrower) and in turn, TRGT receives collateral as either cash or securities. TRGT pays the borrower interest on the collateral received and invests the collateral with the goal of earning a higher yield than the interest rate paid to the borrower. Loans are limited to no more than thirty percent (30%) of the fair value of the total assets in the TRGT portfolio and provided further that such loans are secured by collateral. Securities received as collateral hereunder shall have a fair value equal to at least one hundred two percent (102%) of the fair value of the loaned

(continued)

domestic security or one hundred five percent (105%) of any foreign security. Cash received as collateral shall equal at least one hundred percent (100%) of the fair value of the loaned securities and may be invested by or on behalf of the TRGT in any instrument the TRGT may be directly invested. Cash Collateral is held in the TRGT name and is not subject to custodial credit risk. During the year there were no violations of legal or contractual provisions by the TRGT.

The TRGT securities lending program is managed by a third-party lending agent, Deutsche Bank AG. The TRGT may loan any debt or equity securities which is owned by TRGT. Our securities lending agent manages the average maturities of securities on loan against the average maturities of securities on collateral invested. The maturity gap has a limit of 33 days. This is monitored by investment staff on a periodic basis to ensure compliance.

At June 30, 2023, the TRGT had the following securities on loan and received the collateral as shown below:

SECURITIES LENDING
As of June 30, 2023

Securities on Loan	Fair Value of Securities on Loan	Cash Collateral Received
Fixed	$ 934,388,922	$ 955,138,826
Equity	2,151,395,348	2,199,170,985
Total	$ 3,085,784,270	$ 3,154,309,811

The TRGT has the ability to sell the collateral securities only in the case of a borrower default.

Credit Risk: Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The credit quality distribution for the TRGT's investments in fixed income securities at year end is included in the schedule below. Securities are rated using Standard and Poor's and/or Moody's and are presented below using the Standard and Poor's rating scale. The State Pooled Investment Fund has not obtained a credit quality rating from a nationally recognized credit ratings agency.

TRGT's investment policy specifies that bond issues subject for purchase are investment grade bonds rated by one of the Nationally Recognized Statistical Rating Organizations (NRSROs). There is no requirement to divest an asset if it is downgraded after purchase. For short-term investments, the investment policy provides for the purchase of only the highest quality debt issues. Commercial paper should be rated in the highest tier by all rating agencies which rate the paper, with a minimum of two ratings required. Commercial paper cannot be purchased if a rating agency has the commercial paper on a negative credit watch. The investment policy also requires preparation of a credit analysis report on the corporation prior to purchasing commercial paper.

As noted below, the TRGT does not utilize its own bank accounts but invests in the State Pooled Investment Fund for its operating cash purposes. Required risk disclosures relative to the State Pooled Investment Fund are presented in the State of Tennessee Treasurer's Report. That report is available on the state's website at https://treasury.tn.gov.

(continued)

At June 30, 2023, the TRGT had the following investments:

CREDIT QUALITY DISTRIBUTION FOR SECURITIES WITH CREDIT EXPOSURE AS A PERCENTAGE OF TOTAL INVESTMENTS

As of June 30, 2023

Expressed in Thousands

Rating		Fair Value	Percentage of Total Investments
AAA	$	572,090	0.891%
AA		308,418	0.480%
A		1,089,984	1.697%
BBB		2,587,331	4.029%
BB		410,680	0.640%
B		150,557	0.234%
CCC		51,901	0.081%
CC		3,401	0.005%
D		320	0.000%
NR		3,786,327	5.896%
	$	8,961,009	
U. S. Government Agencies and Obligations explicitly guaranteed by the U. S. Government		4,699,486	
Total Fixed Income Securities	$	13,660,495	
Equity		28,835,779	
Real Estate		7,175,972	
Private Equities		8,747,136	
Strategic Lending		6,396,294	
Preferred Stock not Classified as Fixed Income		122,455	
Derivative Instruments (Not Rated)		777	
Short term investment fund with custodian (NR)		(6,403)	
Short term investments classified as cash (NR)		(719,290)	
Total Investments in TRGT	**$**	**64,213,215**	

(continued)

Interest Rate Risk: Interest rate risk is the risk that future changes in prevailing market rates of interest will have an adverse effect on the fair value of debt investments. The fair values of securities with long terms to maturity may be highly sensitive to interest rate changes. The investment policy for the TRGT states that the maturity of its debt securities may range from short-term instruments, including investments in the State Pooled Investment Fund, to long-term bonds, with consideration of liquidity needs. However, the policy does not specifically address limits on investment maturities. Duration is a measure of a debt investment's exposure to fair value changes arising from changing interest rates. It uses the present value of cash flows weighted for those cash flows as a percentage of the investment's full price. The TRGT had the following investments and effective duration at June 30, 2023.

EFFECTIVE DURATION OF DEBT INVESTMENTS

As of June 30, 2023

Expressed in Thousands

Investment Type		Fair Value	Effective Duration (years)
Government Agencies	$	88,696	7.53
Government Bonds		3,631,247	14.52
Government Inflation Indexed		5,748	0.54
Government Mortgage Backed		3,714,522	5.12
Government Asset Backed		71,086	5.44
Municipal Bonds		23,259	8.68
Commercial Mortgage Backed		262,984	2.33
Corporate Asset Backed		930,575	0.66
Corporate Bonds		4,206,685	7.95
Short-Term Securities		725,693	0.00
Total Debt Investments in TRGT	$	13,660,495	7.88

Asset-Backed Securities: The TRGT invests in various collateralized mortgage obligations (CMOs) which are mortgage-backed securities. These securities are based on cash flows from interest and principal payments on underlying mortgages and could therefore be more sensitive to prepayments by mortgagees as a result of a decline in interest rates. The fair value CMOs at June 30, 2023 was $262,983,713 of which $209,919,200 were CMOs that are generally more sensitive to interest rate of changes.

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Foreign Currency Risk: Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or deposit. The investment policy limits the asset allocation for international investments to twenty-five percent of total assets. The TRGT's exposure to foreign currency risk was as follows:

FOREIGN CURRENCY-DENOMINATED INVESTMENTS

As of June 30, 2023

Expressed in Thousands

Currency	Total Fair Value	Equity	Cash
Australian Dollar	$ 372,430	$ 372,407	$ 23
British Pound Sterling	1,383,117	1,379,437	3,680
Canadian Dollar	1,124,075	1,122,986	1,089
Danish Krone	296,184	296,184	0
Euro Currency	3,736,141	3,732,735	3,406
Hong Kong Dollar	158,310	158,310	0
Japanese Yen	1,436,021	1,426,419	9,602
New Israeli shekel	3,897	3,897	0
New Zealand Dollar	1,543	1,543	0
Norwegian Krone	50,613	50,214	399
Singapore Dollar	105,411	105,406	5
Swedish Krona	228,196	226,451	1,745
Swiss Franc	562,684	562,661	23
Total	$ 9,458,622	$ 9,438,650	$ 19,972

Custodial Credit Risk: Custodial Credit Risk for deposits is the risk that in the event of a bank failure, the TRGT deposits may not be returned to TRGT. The TRGT does not have an explicit policy with regards to Custodial Credit Risk for deposits. At year end, the TRGT had uninsured and uncollateralized cash deposits of $19,971,796 in foreign currency held by our master custodian, State Street Bank, in State Street's name. These deposits were used for investments pending settlement.

Rate of Return: For the year, the money-weighted rate of return on investments in the TRGT, net of investment expense, was 6.71 percent. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Derivatives:

Futures - The TRGT may buy or sell fixed income and equity index futures contracts for the purposes of making asset allocation changes in an efficient and cost-effective manner and to improve liquidity. Gains (losses) on futures hedge losses (gains) produced by any deviation from the TRGT target allocation. The gains and losses resulting from daily fluctuations in the fair value of the outstanding futures contract are settled daily, on the following day, and a receivable or payable is established for any unsettled gain or loss as of the financial statement date. As of June 30, 2023, the TRGT was under contract for fixed income and equity index futures and the resulting receivable is reflected in the financial statements at fair value.

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Foreign Currency Forward Contracts - The international securities expose the TRGT to potential losses due to a possible rise in the value of the US dollar. The TRGT investment managers can reduce foreign currency exposure by selling foreign currency forward contracts, at agreed terms and for future settlement, usually within a year. The manager will reverse the contract by buying the foreign currency before the settlement date. A gain (loss) on this transaction pair will hedge a loss (gain) on the currency movement of the international security. Foreign currency forward contracts expose the TRGT to foreign currency risk as they are denominated in foreign currency. TRGT did not hold any foreign currency forward contracts at June 30, 2023.

Mortgages - The TRGT is authorized to invest in To Be Announced (TBA) mortgage-backed securities similar to the foreign currency forward contracts. The TRGT enters into agreements to purchase pools of mortgage-backed securities prior to the actual security being identified. The TRGT will roll this agreement prior to settlement date to avoid taking delivery of the security. Any unrealized gain on TBA mortgage-backed securities has been reflected in the financial statements as an investment. Any unrealized loss on TBA mortgage-backed securities has been included in the payable established for the mortgages. The notional amounts of these agreements have been included in the financial statements as a receivable and a payable. The TRGT invests in these derivatives to adjust its exposure to mortgage coupon risk and to replicate the return on mortgage-backed securities portfolios without actually purchasing the security.

Credit Default Swaps - The TRGT may invest in Credit Default Swaps to offset credit risk of fixed income investments. The TRGT may enter into a contract and pay an ongoing premium in exchange for the seller to pay the security's value and interest payments if a default occurs. As of June 30, 2023, the TRGT was under contract for Credit Default Swaps and the resulting payable is reflected in the financial statements at fair value.

The fair value balances and notional amounts of derivative instruments outstanding at year end, classified by type, and the changes in fair value of derivative instrument types for the year ended as reported in the financial statements are as follows:

DERIVATIVE SUMMARY

As of June 30, 2023

Expressed in Thousands

	Changes in Fair Value		**Fair Value at June 30, 2023**		
	Financial Statement Classification	**Amount**	**Financial Statement Classification**	**Amount**	**Notional Amount**
Futures Contracts	Investment Income (Loss)	$ (45,384)	Derivative Instruments Receivable	$ 3,952	$ 2,725,643
Swaps Contracts	Investment Income (Loss)	$ 20	Derivative Instruments Payable	$ 0	$ (26)
TBA Mortgage Backed Securities	Investment Income (Loss)	$ 777	Derivative Instrument	$ 777	$ (77,215)

Futures, Credit Default Swaps, and TBA mortgage-backed securities are exchange traded and their price is based on quoted market prices at year end. It is the TRGT policy to conduct derivative transactions through the custodian bank and high-quality money center banks or brokerage firms. The credit risk of futures contracts is managed by maintaining a daily variation margin.

Alternative Investments: The TRGT has investments in strategic lending, private equity funds and real estate with an estimated fair value of $22,319,402,038 at June 30, 2023. Because these investments are not readily marketable, the estimated value is subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market for the investments existed, and such differences could be material. Title to real property invested in by TRGT is held by real estate investment holding companies.

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Commitments:
Standby Commercial Paper Purchase Agreement: The TRGT has agreed to serve as standby commercial paper purchaser for commercial paper issued by the Funding Board of the State of Tennessee. By serving as a standby commercial paper purchaser, the TRGT receives an annual fee of 35 basis points on the $350 million maximum issuance under this agreement during times when both Moody's and Standard and Poor's investment ratings assigned to the State of Tennessee's general obligation bonds are Aaa and AAA respectively, 45 basis points during times when either Moody's or Standard and Poor's has assigned ratings of Aa and AA respectively, or 55 basis points during times when either Moody's or Standard and Poor's has assigned ratings lower than Aa and AA respectively. In the unlikely event that the TRGT would be called upon to purchase the commercial paper, the TRGT would receive interest at a rate equal to prime plus 150 basis points subject to a floor of 5 percent (5%); provided, however, in no even shall the Standby Purchase Rate be in excess of the maximum rate as define in Section 47-14-103, *Tennessee Code Annotated*.

Alternative Investments: The TRGT had unfunded commitments of $8,139,028,807 in private equity, strategic lending, and real estate commitments at year end.

D: NET PENSION LIABILITY (ASSET) FOR COST-SHARING PLANS

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

	Teacher Legacy Pension Plan	Teacher Retirement Plan
Total Pension Liability	$ 28,516,536,176	$ 859,797,638
Plan Fiduciary Net Position	(29,888,918,646)	(896,497,859)
Net Pension Liability (Asset)	$ (1,372,382,470)	$ (36,700,221)
Percent of Net Position to Pension Liability	104.81%	104.27%

Actuarial assumptions: The total pension liability was determined by an actuarial valuation as of June 30, 2022 rolled-forward to a measurement date and a reporting date of June 30, 2023, using the following actuarial assumptions applied to all prior periods included in the measurement:

Inflation	2.25 percent
Salary Increases	Graded salary ranges from 8.72 to 3.44 percent based on age, including inflation, averaging 4.00 percent
Investment Rate of Return	6.75 percent, net of pension plan investment expense, including inflation
Cost of Living Adjustment	2.125 percent

(continued)

The mortality improvement assumption adopted with the 2020 experience study utilizes the most current projection scale published by the Society of Actuaries as of the actuarial valuation date. As of June 30, 2022, the projection scale was updated from Scale MP-2020 to Scale MP-2021. This change was included with other experience gains or losses.

The actuarial assumptions used in the June 30, 2022 actuarial valuation were based on the results of an actuarial experience study performed for the period July 1, 2016 through June 30, 2020.

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2020 actuarial experience study. This return was selected from a blend of values developed using historical market returns and future capital market projections. The future capital market projections were produced using a building-block method in which a best-estimate of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) is developed for each major asset class. These best-estimates 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 of 2.25 percent. The best-estimates of geometric real rates of return and the TCRS investment policy target asset allocation for each major asset class are summarized in the following table:

Asset Class	**Long-Term Expected Real Rate of Return**	**Target Allocations**
U.S. equity	4.88%	31%
Developed market international equity	5.37%	14%
Emerging market international equity	6.09%	4%
Private equity and strategic lending	6.57%	20%
U.S. fixed income	1.20%	20%
Real estate	4.38%	10%
Short-term securities	0.00%	1%
		100%

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees as 6.75 percent based on a comparison of historical market returns and future capital market projections.

(continued)

Discount rate: The discount rate used to measure the total pension liability was 6.75 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions from plan members will be made at the statutorily required contribution rates and that employer contributions from LEAs will be made at the actuarially determined rate as required by statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of net pension liability (asset) to changes in the discount rate: The following presents the Teacher Legacy Pension Plan's and Teacher Retirement Plan's net pension liability (asset) for LEAs using the discount rate of 6.75 percent, as well as what its net pension liability (asset) would be if it were calculated using a discount rate that is one percentage point lower (5.75%) or one percentage point higher (7.75%) than the current rate:

Plan	1 Percent Decrease (5.75%)	Current Discount Rate (6.75%)	1 Percent Increase (7.75%)
Teacher Legacy Pension Plan	$ 2,341,486,212	$ (1,372,382,470)	$ (4,473,188,079)
Teacher Retirement Plan	$ 206,327,298	$ (36,700,221)	$ (214,980,132)

E: OTHER ACCOUNTING DISCLOSURES

Additional Funding: The 112th General Assembly of the State of Tennessee appropriated a one-time additional contribution of $350 million to the Public Employee Retirement Plan for state and higher education employees to be effective July 1, 2022 in accordance with Public Chapter 1130, Section 43, Item 9.

Subsequent event: The General Assembly of the State of Tennessee appropriated a one-time additional contribution of $300 million to the Public Employee Retirement Plan for state and higher education employees to be effective July 1, 2023 in accordance with Public Chapter 418, Section 43, Item 9.

SCHEDULE OF CHANGES TO NET PENSION LIABILITY FOR TEACHER LEGACY PENSION PLAN
Fiscal Year Ended June 30

Total pension liability	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Service cost	$ 356,535,272	$ 364,886,082	$ 320,188,346	$ 324,597,317	$ 345,065,162	$ 345,257,426	$ 351,528,106	$ 359,568,654	$ 393,173,920	$ 404,576,942
Interest	1,848,905,166	1,782,323,366	1,764,235,143	1,716,256,039	1,695,569,610	1,636,816,010	1,618,619,959	1,582,470,751	1,578,251,721	1,483,656,307
Change in benefit terms	0	0	0	0	0	0	0	0	0	0
Difference between expected and actual experience	268,985,486	(218,848,998)	(37,149,799)	(442,566,506)	72,474,157	(119,208,468)	(296,555,977)	(764,354,573)	46,576,630	0
Change of assumptions	0	1,536,567,661	0	0	0	346,381,384	0	0	0	0
Benefit payments including refunds of member contributions	(1,449,629,132)	(1,393,386,731)	(1,359,548,443)	(1,314,913,673)	(1,268,406,149)	(1,218,622,546)	(1,172,892,841)	(1,138,014,028)	(1,096,410,122)	(1,037,013,093)
Net change in total pension liability	1,024,796,792	2,071,541,380	687,725,247	283,373,177	844,702,780	990,623,806	500,699,247	39,670,804	921,592,149	851,220,156
Total pension liability - beginning	27,491,739,384	25,420,198,004	24,732,472,757	24,449,099,580	23,604,396,800	22,613,772,994	22,113,073,747	22,073,402,943	21,151,810,794	20,300,590,638
Total pension liability - ending (a)	$ 28,516,536,176	$ 27,491,739,384	$ 25,420,198,004	$ 24,732,472,757	$ 24,449,099,580	$ 23,604,396,800	$ 22,613,772,994	$ 22,113,073,747	$ 22,073,402,943	$ 21,151,810,794
Plan fiduciary net position										
Contributions - employer	$ 281,849,740	$ 339,111,442	$ 337,066,627	$ 353,767,319	$ 350,734,176	$ 318,336,627	$ 319,576,407	$ 327,521,593	$ 338,301,211	$ 348,474,887
Contributions - members	163,017,032	166,006,995	164,846,662	167,155,248	168,919,223	176,442,688	177,940,219	181,763,296	187,121,567	195,520,938
Net investment income	1,914,418,556	(1,170,762,130)	6,455,724,460	1,215,904,780	1,759,945,606	1,867,629,821	2,365,586,643	560,785,122	646,526,936	3,054,117,822
Benefit payments including refunds of member contributions	(1,449,629,132)	(1,393,386,731)	(1,359,548,443)	(1,314,913,673)	(1,268,406,149)	(1,218,622,546)	(1,172,892,841)	(1,138,014,028)	(1,096,410,122)	(1,037,013,093)
Administrative expenses	(6,511,874)	(4,928,016)	(4,589,319)	(4,571,564)	(5,201,742)	(5,789,356)	(5,347,136)	(6,893,993)	(5,635,689)	(2,663,319)
Net change in plan fiduciary net position	903,144,322	(2,063,958,440)	5,593,499,987	417,342,110	1,005,991,114	1,137,997,234	1,684,863,292	(74,838,010)	69,903,903	2,558,437,235
Plan fiduciary net position - beginning	28,985,774,324	31,049,732,764	25,456,232,777	25,038,890,667	24,032,899,553	22,894,902,319	21,210,039,027	21,284,877,037	21,214,973,134	18,656,535,899
Plan fiduciary net position - ending (b)	$ 29,888,918,646	$ 28,985,774,324	$ 31,049,732,764	$ 25,456,232,777	$ 25,038,890,667	$ 24,032,899,553	$ 22,894,902,319	$ 21,210,039,027	$ 21,284,877,037	$ 21,214,973,134
Net pension liability (asset) - ending (a)-(b)	$ (1,372,382,470)	$ (1,494,034,940)	$ (5,629,534,760)	$ (723,760,020)	$ (589,791,087)	$ (428,502,753)	$ (281,129,325)	$ 903,034,720	$ 788,525,906	$ (63,162,340)

(continued)

SCHEDULE OF CHANGES TO NET PENSION LIABILITY FOR TEACHER RETIREMENT PLAN
Fiscal Year Ended June 30

Total pension liability	2023	2022	2021	2020	2019	2018	2017	2016	2015
Service cost	$ 150,358,613	$ 128,738,485	$ 98,704,242	$ 85,848,628	$ 74,297,210	$ 60,633,198	$ 43,440,149	$ 28,980,449	$ 15,581,497
Interest	49,813,956	38,097,642	28,379,472	20,721,440	14,804,562	9,275,807	5,159,135	2,175,079	583,011
Change in benefit terms	0	0	0	0	0	0	0	0	0
Difference between expected and actual experience	2,232,194	(4,960,240)	(3,478,690)	(10,298,460)	1,446,372	763,491	2,054,643	(1,477,409)	0
Change of assumptions	0	40,871,729	0	0	0	2,496,211	0	0	0
Benefit payments including refunds of member contributions	(6,218,383)	(6,103,207)	(4,252,985)	(3,695,228)	(2,206,627)	(1,628,598)	(1,021,752)	(283,467)	(34,531)
Net change in total pension liability	196,186,380	196,644,409	119,352,039	92,576,380	88,341,517	71,540,109	49,632,175	29,394,652	16,129,977
Total pension liability - beginning	663,611,258	466,966,849	347,614,810	255,038,430	166,696,913	95,156,804	45,524,629	16,129,977	0
Total pension liability - ending (a)	$ 859,797,638	$ 663,611,258	$ 466,966,849	$ 347,614,810	$ 255,038,430	$ 166,696,913	$ 95,156,804	$ 45,524,629	$ 16,129,977

Plan fiduciary net position	2023	2022	2021	2020	2019	2018	2017	2016	2015
Contributions - employer	$ 57,083,930	$ 34,326,459	$ 29,152,958	$ 25,616,933	$ 20,529,121	$ 34,957,065	$ 26,262,053	$ 17,538,589	$ 8,310,132
Contributions - members	99,883,171	85,525,154	72,213,168	63,182,574	52,929,975	43,730,696	32,848,220	21,855,921	10,390,077
Net investment income	51,784,955	(25,502,829)	115,660,117	16,947,487	18,475,708	13,554,381	10,058,396	1,011,283	294,742
Benefit payments including refunds of member contributions	(6,218,383)	(6,103,207)	(4,252,985)	(3,695,228)	(2,206,627)	(1,628,598)	(1,021,752)	(283,467)	(34,531)
Administrative expenses	(2,242,488)	(3,198,368)	(2,559,673)	(2,295,363)	(2,018,230)	(1,846,534)	(1,417,125)	(819,972)	(280,047)
Net change in plan fiduciary net position	200,291,185	85,047,209	210,213,585	99,756,403	87,709,947	88,767,010	66,729,792	39,302,354	18,680,373
Plan fiduciary net position - beginning	696,206,674	611,159,465	400,945,879	301,189,476	213,479,529	124,712,519	57,982,727	18,680,373	0
Plan fiduciary net position - ending (b)	$ 896,497,859	$ 696,206,674	$ 611,159,465	$ 400,945,879	$ 301,189,476	$ 213,479,529	$ 124,712,519	$ 57,982,727	$ 18,680,373
Net pension liability (asset) - ending (a) - (b)	$ (36,700,221)	$ (32,595,416)	$ (144,192,616)	$ (53,331,069)	$ (46,151,046)	$ (46,782,616)	$ (29,555,715)	$ (12,458,098)	$ (2,550,396)

This schedule is intended to show information for ten years. Additional years information will be shown as it becomes available.

(continued)

SCHEDULE OF THE TEACHER LEGACY PENSION PLAN'S NET PENSION LIABILITY (ASSET)
Fiscal Year Ended June 30

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	$ 28,516,536,176	$ 27,491,739,384	$ 25,420,198,004	$ 24,732,472,757	$ 24,449,099,580	$ 23,604,396,800	$ 22,613,772,994	$ 22,113,073,747	$ 22,073,402,943	$ 21,151,810,794
Plan fiduciary net position	29,888,918,646	28,985,774,324	31,049,732,764	25,456,232,777	25,038,890,667	24,032,899,553	22,894,902,319	21,210,039,027	21,284,877,037	21,214,973,134
Net pension liability (asset)	$ (1,372,382,470)	$ (1,494,034,940)	$ (5,629,534,760)	$ (723,760,020)	$ (589,791,087)	$ (428,502,753)	$ (281,129,325)	$ 903,034,720	$ 788,525,906	$ (63,162,340)
Plan fiduciary net position as a percentage of total pension liability	104.81%	105.43%	122.15%	102.93%	102.41%	101.82%	101.24%	95.92%	96.43%	100.30%
Covered payroll	$ 3,246,618,701	$ 3,291,063,367	$ 3,282,482,099	$ 3,326,750,965	$ 3,352,756,393	$ 3,501,703,581	$ 3,536,976,053	$ 3,622,228,641	$ 3,742,270,034	$ 3,925,131,835
Net pension liability (asset) as a percentage of covered payroll	(42.27)%	(45.40)%	(171.50)%	(21.76)%	(17.59)%	(12.24)%	(7.95%)	24.93%	21.07%	(1.61%)

(continued)

SCHEDULE OF THE TEACHER RETIREMENT PLAN'S NET PENSION LIABILITY (ASSET)
Fiscal Year Ended June 30

	2023	2022	2021	2020	2019	2018	2017	2016	2015
Total pension liability	$ 859,797,638	$ 663,611,258	$ 466,966,849	$ 347,614,810	$ 255,038,430	$ 166,696,913	$ 95,156,804	$ 45,524,629	$ 16,129,977
Plan fiduciary net position	896,497,859	696,206,674	611,159,464	400,945,879	301,189,476	213,479,529	124,712,519	57,982,727	18,680,373
Net pension liability (asset)	$ (36,700,221)	$ (32,595,416)	$ (144,192,615)	$ (53,331,069)	$ (46,151,046)	$ (46,782,616)	$ (29,555,715)	$ (12,458,098)	$ (2,550,396)
Plan fiduciary net position as a percentage of total pension liability	104.27%	104.91%	130.88%	115.34%	118.10%	128.06%	131.06%	127.37%	115.81%
Covered payroll	$ 1,987,897,627	$ 1,709,064,462	$ 1,442,090,457	$ 1,261,909,185	$ 1,056,859,310	$ 873,677,206	$ 655,205,868	$ 441,775,131	$ 207,753,299
Net pension liability (asset) as a percentage of covered payroll	(1.85)%	(1.91)%	(10.00)%	(4.23)%	(4.37)%	(5.35%)	(4.51%)	(2.82%)	(1.23%)

This schedule is intended to show information for ten years. Additional years' information will be shown as it becomes available.

(continued)

SCHEDULE OF THE TEACHER LEGACY PENSION PLAN'S CONTRIBUTIONS
Fiscal Year Ended June 30

	Actuarially-Determined Contribution	Contributions in Relation to the Actuarially-Determined Contribution	Contribution Deficiency	Covered Payroll	Contributions as a Percentage of Covered Payroll
2023	$ 281,849,740	$ 281,849,740	$ 0	$ 3,246,618,701	8.69%
2022	339,111,442	339,111,442	0	3,291,063,367	10.30%
2021	337,066,627	337,066,627	0	3,282,482,099	10.27%
2020	353,767,319	353,767,319	0	3,326,750,965	10.63%
2019	350,734,176	350,734,176	0	3,352,756,393	10.46%
2018	318,336,627	318,336,627	0	3,501,703,581	9.08%
2017	319,576,407	319,576,407	0	3,536,976,053	9.04%
2016	327,521,593	327,521,593	0	3,622,228,641	9.04%
2015	338,301,211	338,301,211	0	3,742,270,034	9.04%
2014	348,474,888	348,474,888	0	3,931,983,889	8.86%

(continued)

SCHEDULE OF THE TEACHER RETIREMENT PLAN'S CONTRIBUTIONS
Fiscal Year Ended June 30

	Actuarially-Determined Contribution	Contributions in Relation to the Actuarially-Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contributions as a Percentage of Covered Payroll
2023	$ 57,083,930	$ 57,083,930	$ 0	$ 1,987,897,627	2.87%
2022	34,326,459	34,326,459	0	1,709,064,462	2.01%
2021	29,152,958	29,152,958	0	1,442,090,457	2.02%
2020	25,616,933	25,616,933	0	1,261,909,185	2.03%
2019	20,529,122	20,529,122	0	1,056,859,310	1.94%
2018	14,251,505	34,957,065	(20,705,560)	873,677,206	4.00%
2017	10,221,212	26,262,053	(16,040,841)	655,205,868	4.01%
2016	11,044,378	17,538,589	(6,494,211)	441,775,131	3.97%
2015	5,193,832	8,310,132	(3,116,300)	207,753,299	4.00%

This schedule is intended to show information for ten years. Additional years' information will be shown as it becomes available.

SCHEDULE OF THE PUBLIC EMPLOYEES RETIREMENT PLAN, THE TEACHER LEGACY PENSION PLAN, AND THE TEACHER RETIREMENT PLAN INVESTMENT RETURNS
Fiscal Year Ended June 30

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	6.71%	-3.83%	25.78%	5.05%	7.76%	8.40%	11.30%	2.78%	3.29%	16.49%

(continued)

Method and assumptions used in calculations of actuarially determined contributions.

The actuarially determined contributions for the fiscal year ended June 30, 2023 for Local Education Agencies for the Teacher Legacy Plan and the Teacher Retirement Plan were calculated as a result of an actuarial valuation performed as of June 30, 2021. The following actuarial methods and assumptions were used to determine contribution rates reported in the schedule:

	Teacher Legacy Plan	Teacher Retirement Plan
Actuarial cost method	Entry Age Normal	Entry Age Normal
Amortization method	Level Dollar Amortization	Level Dollar Amortization
Remaining amortization period	N/A	N/A
Inflation	2.25 percent	2.25 percent
Cost of living adjustments	2.125 percent	2.125 percent
Salary increases	Graded salary ranges from 8.72 percent to 3.44 percent based on age, including inflation, averaging 4.00 percent	Graded salary ranges from 8.72 percent to 3.44 percent based on age, including inflation, averaging 4.00 percent
Investment rate of returns	6.75 percent, net of pension plan investment expense, including inflation	6.75 percent, net of pension plan investment expense, including inflation

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
SCHEDULE OF ADMINISTRATIVE EXPENSES
For the Year Ended June 30, 2023

	Public Employee Retirement Plan	Teacher Legacy Pension Plan	Teacher Retirement Plan	TOTAL
PERSONNEL SERVICES				
Employee Benefits	$ 1,010,845	$ 404,570	$ 139,321	$ 1,554,736
Salaries and Wages	2,650,329	1,060,742	365,286	4,076,357
Training	16,810	6,728	2,317	25,855
TOTAL PERSONNEL SERVICES	3,677,984	1,472,040	506,924	5,656,948
PROFESSIONAL SERVICES				
Accounting	616,667	246,808	84,993	948,468
Actuarial Services	44,963	17,995	6,197	69,155
Information Systems	4,801,088	1,921,539	661,718	7,384,345
Legal Services	433,919	173,667	59,806	667,392
Management Services	279,166	111,731	38,477	429,374
Medical Services	110,690	44,302	15,256	170,248
Plan Administration and Outreach Services	2,237,713	895,600	308,417	3,441,730
Treasurer Office, Internal Audit, HR	930,858	372,557	128,297	1,431,712
TOTAL PROFESSIONAL SERVICES	9,455,064	3,784,199	1,303,161	14,542,424
COMMUNICATION				
Postage	243,627	97,507	33,579	374,713
Printing	97,860	39,166	13,488	150,514
Telephone	33,704	13,490	4,645	51,839
Travel	14,002	5,604	1,930	21,536
TOTAL COMMUNICATION	389,193	155,767	53,642	598,602
OPERATING EXPENSES				
Amortization of Intangible Assets	2,135,059	854,515	294,268	3,283,842
Office Space	76,969	30,805	10,608	118,382
Supplies and Maintenance	5,860	2,345	808	9,013
Utilities and Fuel	10	4	2	16
TOTAL OPERATING EXPENSES	2,217,898	887,669	305,686	3,411,253
MISCELLANEOUS				
Other Services and Charges	530,194	212,199	73,075	815,468
TOTAL MISCELLANEOUS	530,194	212,199	73,075	815,468
TOTAL ADMINISTRATIVE EXPENSES	$ 16,270,333	$ 6,511,874	$ 2,242,488	$ 25,024,695

SCHEDULE OF INVESTMENT EXPENSES FOR THE YEAR ENDED JUNE 30, 2023

The Tennessee Consolidated Retirement System (TCRS) is a participant in the Tennessee Retiree Group Trust (TRGT) and owns 99% of the net asset value. All TRGT participants share equally in the gains, losses, and expenses of the trust. All participants are charged an annual investment expense of 13 basis points (0.13%) and this amount is deducted from the net asset value (NAV) of TRGT daily. For financial statement purposes, plan administrative expenses, actual and accrued, are totaled and evaluated against the fee collected. Any amount in excess or a deficiency is rebated to/charged to plan participants based on their date of participation in that fiscal year. The expenses reflected in this schedule reflect all plan investment expenses for TRGT.

Personnel Services			
	Employee Benefits	$	2,198,260
	Salaries and Wages		7,828,867
	Training		41,045
	Total Personnel Services:		10,068,172
Professional Services			
	Accounting		753,947
	Information Systems		253,111
	Investment Administration and Outreach Services		41,084
	Legal Services		740,112
	Management Services		165,063
	Treasurer Office, Internal Audit, HR		903,843
	Total Professional Services:		2,857,160
Operating Expenses			
	Communication		166,089
	Office Space		71,927
	Supplies and Maintenance		11,696
	Utilities and Fuel		3,955
	Other Services and Charges		6,737
	Total Operating Expenses:		260,404
Investment Fees			
	Alternative Asset Fees		92,908
	External Investment Manager Fees		34,238,719
	Investment Consulting Fees		1,241,254
	Investment Custodian Fees		1,691,699
	Legal Fees		278,509
	Real Estate Manager Fees		3,230,951
	Other Investment Professional Fees		9,984,219
	Total Investment Fees Charged:		50,758,259
Total Investment Expenses of TRGT		**$**	**63,943,995**
Investment Expense Charged to Other TRGT Participants			(632,759)
Total Investment Expenses of TCRS		**$**	**63,311,236**

TENNESSEE CONSOLIDATED RETIREMENT SYSTEM
SCHEDULE OF EXPENSES FOR CONSULTANTS
For the Year Ended June 30, 2023

	Public Employee Retirement Plan	Teacher Legacy Pension Plan	Teacher Retirement Plan	TOTAL
ACTUARIAL SERVICES				
Findley Inc	$ 44,963	$ 17,995	$ 6,197	$ 69,155
TOTAL ACTUARIAL SERVICES	44,963	17,995	6,197	69,155
CALL CENTER SERVICES				
Empower	1,113,046	445,475	153,408	1,711,929
TOTAL CALL CENTER SERVICES	1,113,046	445,475	153,408	1,711,929
INFORMATION SYSTEMS SERVICES				
Deloitte Consulting LLP	677,530	271,167	93,382	1,042,079
TOTAL INFORMATION SYSTEMS SERVICES	677,530	271,167	93,382	1,042,079
LEGAL SERVICES				
Ice Miller	33,435	13,382	4,608	51,425
Williams & Jensen PLLC	32,866	13,154	4,530	50,550
TOTAL LEGAL SERVICES	66,301	26,536	9,138	101,975
MEDICAL REVIEW SERVICES				
University of Massachusetts Worcester	110,690	44,302	15,256	170,248
TOTAL MEDICAL REVIEW SERVICES	110,690	44,302	15,256	170,248
PLAN ADMINISTRATIVE SERVICES				
Missouri Department of Health & Senior Service	171	68	23	262
PBI Research Services	64,692	25,892	8,916	99,500
University of Tennessee	28,607	11,450	3,943	44,000
USI Consulting Group	410,439	164,270	56,570	631,279
TOTAL PLAN ADMINISTRATIVE SERVICES	503,909	201,680	69,452	775,041
OTHER SERVICES				
Background Online	58	23	8	89
TOTAL OTHER SERVICES	58	23	8	89
TOTAL EXPENSES FOR CONSULTANTS	**$ 2,516,497**	**$ 1,007,178**	**$ 346,841**	**$ 3,870,516**

Note: For information regarding fees paid to investment professionals, refer to the Investment Section of this report.