

**REPORT OF THE AUDIT OF THE
TEACHERS' RETIREMENT SYSTEM OF
THE STATE OF KENTUCKY**

**For The Years Ended
June 30, 2024 and 2023**



**ALLISON BALL
AUDITOR OF PUBLIC ACCOUNTS
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ALLISON BALL
AUDITOR OF PUBLIC ACCOUNTS

Independent Auditor's Report

Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of Teachers' Retirement System of the State of Kentucky (TRS), a component unit of the Commonwealth of Kentucky as of and for the year ended June 30, 2024, and the related notes to the financial statements, which collectively comprise TRS's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of TRS as of June 30, 2024, and the changes in its fiduciary net position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for 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 TRS 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.

Emphasis-of-Matter (Reporting Entity)

As discussed in Note 1, the financial statements present only TRS, and are not intended to present fairly the financial position of the Commonwealth of Kentucky, or the results of its operations and cash flows of its proprietary fund types in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.



Board of Trustees
Teachers' Retirement System of the State of Kentucky

Responsibilities of Management for the Financial Statements

TRS's 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 TRS'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 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 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 TRS'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 TRS'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.

Board of Trustees
Teachers' Retirement System of the State of Kentucky

Other Matter – Comparative Financial Statements

The financial statements of TRS for the year ended June 30, 2023, were audited by another auditor, who expressed an unmodified opinion on those statements on November 15, 2023. In our opinion, the comparative financial statements presented herein as of and for the year ended June 30, 2023, are consistent, in all material respects, with the audited financial statements from which it has been derived.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 8 through 12), Schedule of Changes in Net Pension Liability - Retirement Annuity Trust (and related notes) (pages 84 through 88), Schedule of Changes in the Net OPEB Liability - Health Insurance Trust (and related notes) (pages 89 through 93), and Schedule of Changes in the Net OPEB Liability - Life Insurance Trust (and related notes) (pages 94 through 98) 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 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

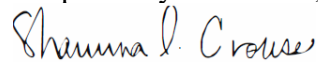
Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise TRS's basic financial statements. The fiscal year (FY) 2024 additional supporting schedules (pages 102 through 104) are presented for purposes of additional analysis and are not a required part of the basic financial statements. The Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Administrative Expenses, Schedule of Professional Services and Contracts, and Schedule of Contracted Investment Management Expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole. The FY 2023 information on the additional supporting schedules (pages 102 through 104) was subjected to the auditing procedures applied in the FY 2023 audit of the basic financial statements by other auditors, whose report on such information stated that it was fairly stated in all material respects in relation to the FY 2023 basic financial statements as a whole.

Board of Trustees
Teachers' Retirement System of the State of Kentucky

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated November 15, 2024, on our consideration of TRS's internal control over financial reporting and on our test of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is solely 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 the effectiveness of 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 TRS's internal control over financial reporting and compliance.

Respectfully Submitted,



Shawna Crouse, CPA
Assistant Auditor of Public Accounts
Frankfort, KY

November 15, 2024

MANAGEMENT'S DISCUSSION AND ANALYSIS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY MANAGEMENT'S DISCUSSION AND ANALYSIS

This discussion and analysis of the financial performance of the Teachers' Retirement System of the State of Kentucky (TRS or system) provides an overview of the Retirement Annuity Trust, the Health Insurance Trust, and the Life Insurance Trust for the fiscal years ended June 30, 2024, and 2023. It should be read in conjunction with the respective financial statements, which begin on page 16. TRS is the fiduciary of funds held in trust for its members.

USING THIS FINANCIAL REPORT

Because of the long-term nature of the retirement annuity, health insurance, and life insurance trusts, financial statements alone do not provide the complete scope of TRS. The notes, required supplemental information, and supporting schedules complete that scope.

Information about the activities of the retirement annuity, health insurance, and life insurance trusts and the 403(b) Tax-Sheltered Trust as a whole is provided in the Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position (on pages 16-19). The Notes to the Financial Statements are an essential part of the basic financial statements. They provide important background and detailed information about TRS, the plan, and the basic financial statements themselves.

The Required Supplementary Information includes historical trend information about the funded status of the retirement annuity, health insurance, and life insurance trusts presented as required by accounting standards. The Schedules of Employer Contributions present historical trend information about the required contributions of employers and the contributions made by employers in relation to the requirement. These schedules provide information that contributes to understanding the changes over time in the funded status of the plans. Separate reports prepared by the actuary using a board-adopted funding policy provide a long-term, ongoing plan perspective and the progress made in accumulating sufficient assets to pay benefits and insurance premiums when due.

TEACHERS' RETIREMENT SYSTEM AS A WHOLE

In the fiscal year ended June 30, 2024, the system's combined fiduciary net position increased by \$2.45 billion - from \$27.08 billion in 2023 to \$29.53 billion in 2024. In 2022, the combined net position totaled \$25.26 billion. The following summaries focus on the fiduciary net position and changes in fiduciary net position of TRS's retirement annuity, health insurance, and life insurance trusts.

Summary of Fiduciary Net Position (In Millions)

	Retirement Annuity Trust			Health Insurance Trust			Life Insurance Trust		
	2024	2023	2022	2024	2023	2022	2024	2023	2022
Assets									
Cash and Investments	\$ 26,032.0	\$ 24,189.3	\$ 22,846.5	\$ 3,310.9	\$ 2,714.1	\$2,229.8	\$101.3	\$ 93.9	\$ 88.3
Receivables	156.2	128.5	122.8	74.5	66.1	57.8	0.4	0.4	0.3
Capital Assets	5.7	7.5	9.3	-	-	-	-	-	-
Total Assets	<u>26,193.9</u>	<u>24,325.3</u>	<u>22,978.6</u>	<u>3,385.4</u>	<u>2,780.2</u>	<u>2,287.6</u>	<u>101.7</u>	<u>94.3</u>	<u>88.6</u>
Total Liabilities	<u>(85.8)</u>	<u>(80.7)</u>	<u>(78.6)</u>	<u>(67.7)</u>	<u>(36.8)</u>	<u>(18.5)</u>	<u>(0.2)</u>	<u>(0.3)</u>	<u>(0.2)</u>
Net Position	<u>\$ 26,108.1</u>	<u>\$ 24,244.6</u>	<u>\$ 22,900.0</u>	<u>\$ 3,317.7</u>	<u>\$ 2,743.4</u>	<u>\$2,269.1</u>	<u>\$101.5</u>	<u>\$ 94.0</u>	<u>\$ 88.4</u>

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS
(Continued)**

	Trust Totals* ** (In Millions)		
	2024	2023	2022
Assets			
Cash & Investments	\$ 29,444.2	\$ 26,997.3	\$ 25,164.6
Receivables	231.1	195.0	180.9
Capital Assets	5.7	7.5	9.3
Total Assets	29,681.0	27,199.8	25,354.8
Total Liabilities	(153.7)	(117.8)	(97.3)
Net Position	\$ 29,527.3	\$ 27,082.0	\$ 25,257.5

**Trust Totals excludes Other Funds, which consists of the 403(b) Tax-Sheltered Trust, the Supplemental Benefit Fund, and the Losey Scholarship Fund. Other Funds had a combined fiduciary net position of \$1.4 million for 2024, \$1.3 million for 2023, and \$1.1 million for 2022.*

***Amounts above may not agree to the financial statements due to rounding.*

The fiduciary net position of the Retirement Annuity Trust increased by 7.7% (\$26.11 billion compared to \$24.24 billion in 2023). The fiduciary net position in 2022 was \$22.9 billion. Net investment income was about \$2.81 billion in 2024 versus \$2.27 billion in 2023. This compares to a negative \$2.73 billion in 2022.

The fiduciary net position of the Health Insurance Trust increased to \$3.32 billion, with gains of 20.9% each of the last two years primarily due to investment income and contributions being more than the amount of insurance benefits. The 2022 fiduciary net position was \$2.27 billion.

The Summary of Changes in Fiduciary Net Position is presented below followed by discussion of the activities within the different trusts.

**Summary of Changes in Fiduciary Net Position
(In Millions)**

	Retirement Annuity Trust			Health Insurance Trust			Life Insurance Trust		
	2024	2023	2022	2024	2023	2022	2024	2023	2022
Additions									
Member Contributions	\$ 385.9	\$ 366.8	\$ 357.0	\$ 155.3	\$ 149.2	\$ 145.7	\$ -	\$ -	\$ -
Employer Contributions	1,178.6	1,144.4	1,679.6	224.3	208.8	151.7	3.4	3.2	2.8
Net Investment Increase (Decrease)	2,813.7	2,266.1	(2,727.8)	340.3	243.1	(219.5)	10.3	8.7	(15.7)
Total Additions	4,378.2	3,777.3	(691.2)	719.9	601.1	77.9	13.7	11.9	(12.9)
Deductions									
Benefit Payments	2,467.0	2,391.3	2,305.9	-	-	-	6.2	6.3	6.2
Refunds	32.9	26.9	26.7	-	-	-	-	-	-
Administrative Expense	14.8	14.5	12.0	2.1	2.0	2.1	-	-	-
Insurance Expenses	-	-	-	143.5	124.8	107.2	-	-	-
Total Deductions	2,514.7	2,432.7	2,344.6	145.6	126.8	109.3	6.2	6.3	6.2
Net Increase (Decrease)	1,863.5	1,344.6	(3,035.8)	574.3	474.3	(31.4)	7.5	5.6	(19.1)
Fiduciary Net Position									
Beginning of Year	24,244.6	22,900.0	25,935.8	2,743.4	2,269.1	2,300.5	94.0	88.4	107.5
End of Year	\$26,108.1	\$ 24,244.6	\$ 22,900.0	\$3,317.7	\$2,743.4	\$2,269.1	\$101.5	\$ 94.0	\$ 88.4

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS
(Continued)**

	Trust Totals* ** (In Millions)		
	2024	2023	2022
Additions			
Member Contributions	\$ 541.2	\$ 516.0	\$ 502.7
Employer Contributions	1,406.3	1,356.4	1,834.1
Net Investment Increase (Decrease)	<u>3,164.3</u>	<u>2,517.9</u>	<u>(2,963.0)</u>
Total Additions	5,111.8	4,390.3	(626.2)
Deductions			
Benefit Payments	2,473.2	2,397.6	2,312.1
Refunds	32.9	26.9	26.7
Administrative Expense	16.9	16.5	14.1
Insurance Expenses	<u>143.5</u>	<u>124.8</u>	<u>107.2</u>
Total Deductions	<u>2,666.5</u>	<u>2,565.8</u>	<u>2,460.1</u>
Net Increase (Decrease)	2,445.3	1,824.5	(3,086.3)
Fiduciary Net Position			
Beginning of Year	<u>27,082.0</u>	<u>25,257.5</u>	<u>28,343.8</u>
End of Year	<u>\$ 29,527.3</u>	<u>\$ 27,082.0</u>	<u>\$ 25,257.5</u>

**Trust Totals excludes Other Funds, which consists of the 403(b) Tax-Sheltered Trust, the Supplemental Benefit Fund, and the Losey Scholarship Fund.*

***Amounts above may not agree to the financial statements due to rounding.*

RETIREMENT ANNUITY TRUST ACTIVITIES

Retirement contributions are calculated by applying a percentage factor to salary with member and employer contributions withheld from each paycheck. Members also may pay contributions to repurchase previously refunded service credit or to purchase various types of elective service credit.

In 2024, employer contributions totaled \$1.18 billion, a net increase of \$34.1 million from the prior fiscal year mainly due to increases in the amount required by the actuary for the unfunded liability and contributions for higher teacher salaries. The decrease from 2022 to 2023 resulted primarily from the state's additional employer contributions in 2022 of \$479 million to pay off previously awarded benefits.

The Retirement Annuity Trust experienced net investment income of \$2.81 billion in 2024 after net investment income of \$2.27 billion for 2023. For 2022, net investment income was a negative \$2.73 billion. Deductions increased \$82 million in 2024 and \$88.1 million in 2023, which can be attributed to increases in the number of benefit recipients. Members and beneficiaries on the retiree payroll as of June 30, 2024, increased year over year each of the last two years, with a gain of about 800 over the prior year and 1,121 two years ago.

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS
(Continued)**

OTHER POSTEMPLOYMENT BENEFIT (OPEB) ACTIVITIES

During 2024, the Health Insurance Trust member contributions increased \$6.1 million from 2023, which followed a \$3.5 million increase from 2022. This represented a continuing increase in member's salaries paid by the local school district employers. Also, during 2024, employer contributions increased \$15.5 million from 2023 as the state made its contribution of the health insurance premiums for members who retired after July 1, 2010, who participate in the Kentucky Employees' Health Plan (KEHP).

In 2024, the Health Insurance Trust experienced net investment income of \$340.3 million compared to the previous year's increase of \$243.1 million net investment income. For 2022, net investment income was a negative \$219.5 million.

The Life Insurance Trust experienced net investment income of \$10.3 million in 2024, compared to net investment income of \$8.7 million in 2023 and a negative \$15.7 million in 2022. Life insurance benefits paid for 2024, 2023 and 2022 were \$6.2 million, \$6.3 million, and \$6.2 million, respectively.

FUNDING

For the 2022-2024 biennium, the state budgeted \$1.28 billion of additional employer contributions for the unfunded liability of the Retirement Annuity Trust. The plan fiduciary net position as a percentage of total pension liability measured in accordance with Governmental Accounting Standards Board (GASB) Statement 67 was 60.4% as of June 30, 2024, compared to 2023's 57.7%. The separately issued actuary's valuation shows progress of the trust's funded status over the amortization period set by the board funding policy. The additional funding provided in the budget resulted in the actuarially determined employer contribution (ADEC) being made for 2024 and 2023. Assuming that contributions to the retirement trust are made by the state from year to year in the future as recommended by the actuary, TRS should have sufficient assets to provide all benefits due as defined by law to members.

The funding of the health insurance and life insurance trusts is presented in Notes 8 and 9 of these financial statements and the Required Supplementary Information in accordance with GASB Statement 74. Current obligations are being met by current funding and the Shared Responsibility solution enacted in 2010 continues to prefund retiree health benefits. The Schedule of Employer Contributions presented in the Required Supplementary Information provides the required contributions for the health and life insurance trusts.

HISTORICAL TRENDS

Accounting standards require that the Statement of Fiduciary Net Position presents assets at fair value; this includes only benefits and refunds due to plan members and beneficiaries. The standards also require presenting accrued investment and administrative expenses as of the reporting date. Detailed information regarding the funded status - including the key actuarial assumptions, target allocations, and the sensitivity of the discount rate - can be found for the Retirement Annuity Trust in Note 4 of the financial statements, in Note 8 for the Health Insurance Trust and in Note 9 for the Life Insurance Trust. The schedules of employer contributions are provided in the Required Supplementary Information.

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
MANAGEMENT'S DISCUSSION AND ANALYSIS
(Continued)**

TRS's independent consulting actuaries are members of the American Academy of Actuaries and are experienced in performing valuations for public retirement systems. As mandated by state law, the valuations of the retirement annuity and health insurance trusts are prepared in accordance with principles of practice prescribed by the Actuarial Standards Board consistent with accepted actuarial procedures. Actuarial assumptions used in the valuations are internally consistent and reasonable based on the actual experience of the trusts. An actuarial audit was completed in 2015, which confirmed the accuracy of actuarial procedures and the reasonableness of assumptions. A five-year experience study was completed in 2021, which also confirmed the reasonableness of assumptions based upon the actual experience of the trusts. In 2023, the actuary completed a review of economic assumptions.

This financial report is designed to provide citizens, participating employers, plan members, and other users with an overview of TRS's fiscal practices. Direct questions or requests for additional information to TRS Chief Financial Officer, Mark Whelan.

FINANCIAL STATEMENTS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2024

	Retirement Annuity Trust	Health Insurance Trust	Life Insurance Trust	Other Funds	Total
ASSETS					
Cash	\$ 259,780,594	\$ 158,491,246	\$ 408,935	\$ 190,501	\$ 418,871,276
Prepaid expenses	39,648	-	-	-	39,648
Receivables					
Contributions	50,326,612	12,521,802	55,791	-	62,904,205
Due From Other Trusts	10,135,426	-	-	-	10,135,426
State of Kentucky	-	-	55,327	-	55,327
Investment Income	73,083,001	7,854,183	328,869	4,439	81,270,492
Investment Sales Receivable	22,671,447	4,171,118	1,350	-	26,843,915
Other Receivables	26,965	49,992,663	-	-	50,019,628
Total Receivables	<u>156,243,451</u>	<u>74,539,766</u>	<u>441,337</u>	<u>4,439</u>	<u>231,228,993</u>
Investments, at Fair Value (See Note 5)					
Short-term Investments	572,635,564	190,546,793	4,919,258	374,263	768,475,878
Fixed Income	3,344,709,780	247,128,630	16,758,846	202,656	3,608,799,912
Equity	15,374,903,827	1,823,215,375	62,780,493	595,103	17,261,494,798
Alternative Investments	2,079,165,274	246,078,333	6,429,611	-	2,331,673,218
Real Estate	1,712,653,006	156,478,824	7,037,595	-	1,876,169,425
Additional Categories	2,688,094,277	488,999,159	3,048,893	-	3,180,142,329
Total Investments	<u>25,772,161,728</u>	<u>3,152,447,114</u>	<u>100,974,696</u>	<u>1,172,022</u>	<u>29,026,755,560</u>
Capital Assets	28,238,153	-	-	-	28,238,153
Accumulated Depreciation	(22,508,768)	-	-	-	(22,508,768)
Net Capital Assets	<u>5,729,385</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5,729,385</u>
Total Assets	<u>26,193,954,806</u>	<u>3,385,478,126</u>	<u>101,824,968</u>	<u>1,366,962</u>	<u>29,682,624,862</u>
LIABILITIES					
Accrued Expenses and Other Liabilities	3,447,683	22,931,226	80,086	-	26,458,995
Due to Other Trusts	-	9,944,788	185,760	4,878	10,135,426
State of Kentucky	15,085,250	16,872,140	-	-	31,957,390
Investment Purchases Payable	67,285,796	18,019,114	-	-	85,304,910
Total Liabilities	<u>85,818,729</u>	<u>67,767,268</u>	<u>265,846</u>	<u>4,878</u>	<u>153,856,721</u>
Net Position Restricted for Pension and Other Postemployment Benefits	<u>\$ 26,108,136,077</u>	<u>\$ 3,317,710,858</u>	<u>\$ 101,559,122</u>	<u>\$ 1,362,084</u>	<u>\$ 29,528,768,141</u>

The Combining Statement of Fiduciary Net Position-Other Funds is presented on page 20.

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

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
STATEMENT OF FIDUCIARY NET POSITION
As of June 30, 2023

	Retirement Annuity Trust	Health Insurance Trust	Life Insurance Trust	Other Funds	Total
ASSETS					
Cash	\$ 256,046,235	\$ 300,467,448	\$ 490,418	\$ 211,699	\$ 557,215,800
Prepaid expenses	19,774	-	-	-	19,774
Receivables					
Contributions	48,576,918	12,068,376	60,464	-	60,705,758
Due From Other Trusts	7,977,383	-	-	-	7,977,383
State of Kentucky	-	-	-	-	-
Investment Income	59,043,290	5,424,732	319,147	4,380	64,791,549
Investment Sales Receivable	12,850,729	1,682,228	-	-	14,532,957
Other Receivables	40,625	46,973,359	-	-	47,013,984
Total Receivables	<u>128,488,945</u>	<u>66,148,695</u>	<u>379,611</u>	<u>4,380</u>	<u>195,021,631</u>
Investments, at Fair Value (See Note 5)					
Short-term Investments	568,572,723	77,221,128	5,069,152	356,519	651,219,522
Fixed Income	2,971,945,560	153,143,085	17,942,483	214,946	3,143,246,074
Equity	14,287,643,121	1,406,514,939	56,182,952	493,746	15,750,834,758
Alternative Investments	1,915,329,613	220,197,307	4,921,166	-	2,140,448,086
Real Estate	1,777,282,982	159,444,210	6,513,395	-	1,943,240,587
Additional Categories	2,412,438,221	397,083,937	2,795,704	-	2,812,317,862
Total Investments	<u>23,933,212,220</u>	<u>2,413,604,606</u>	<u>93,424,852</u>	<u>1,065,211</u>	<u>26,441,306,889</u>
Capital Assets	28,171,057	-	-	-	28,171,057
Accumulated Depreciation	(20,705,010)	-	-	-	(20,705,010)
Net Capital Assets	<u>7,466,047</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,466,047</u>
Total Assets	<u>24,325,233,221</u>	<u>2,780,220,749</u>	<u>94,294,881</u>	<u>1,281,290</u>	<u>27,201,030,141</u>
LIABILITIES					
Accrued Expenses and Other Liabilities	2,966,452	13,062,293	72,653	-	16,101,398
Due to Other Trusts	-	7,823,792	149,111	4,480	7,977,383
State of Kentucky	29,211,585	10,443,709	39,839	-	39,695,133
Investment Purchases Payable	48,501,059	5,477,874	3,363	-	53,982,296
Total Liabilities	<u>80,679,096</u>	<u>36,807,668</u>	<u>264,966</u>	<u>4,480</u>	<u>117,756,210</u>
Net Position Restricted for Pension and Other Postemployment Benefits	<u>\$ 24,244,554,125</u>	<u>\$ 2,743,413,081</u>	<u>\$ 94,029,915</u>	<u>\$ 1,276,810</u>	<u>\$ 27,083,273,931</u>

The Combining Statement of Fiduciary Net Position-Other Funds is presented on page 20.

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

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For The Fiscal Year Ended June 30, 2024

	Retirement Annuity Trust	Health Insurance Trust	Life Insurance Trust	Other Funds	Total
ADDITIONS					
Contributions					
State of Kentucky	\$ 1,085,041,513	\$ 96,418,669	\$ 2,777,522	\$ -	\$ 1,184,237,704
Others Employers	93,640,460	127,901,507	579,250	-	222,121,217
Members	385,906,512	155,327,151	-	17,740	541,251,403
Total Contributions	1,564,588,485	379,647,327	3,356,772	17,740	1,947,610,324
Investment Income (Loss)					
Net Appreciation (Depreciation) in					
Fair Value of Investments	2,381,075,925	288,185,945	8,920,554	89,132	2,678,271,556
Interest	237,648,164	43,427,659	970,215	35,628	282,081,666
Dividends	250,196,624	17,729,767	692,275	9,033	268,627,699
Rental Income, Net	24,113,698	-	-	-	24,113,698
Securities Lending, Gross Earnings	38,299,068	-	682,519	7,531	38,989,118
Gross Investment Income (Loss)	2,931,333,479	349,343,371	11,265,563	141,324	3,292,083,737
Less: Investment Expense	(81,907,104)	(9,049,993)	(307,517)	-	(91,264,614)
Less: Securities Lending Expense	(35,732,348)	-	(642,961)	(7,075)	(36,382,384)
Net Investment Income (Loss)	2,813,694,027	340,293,378	10,315,085	134,249	3,164,436,739
Total Additions	4,378,282,512	719,940,705	13,671,857	151,989	5,112,047,063
DEDUCTIONS					
Benefits	2,466,971,497	-	6,106,000	66,317	2,473,143,814
Refunds of Contributions	32,921,776	-	-	-	32,921,776
Insurance Expenses	-	143,521,932	-	-	143,521,932
Administrative Expense	14,807,287	2,120,996	36,650	398	16,965,331
Total Deductions	2,514,700,560	145,642,928	6,142,650	66,715	2,666,552,853
Net Increase (Decrease)	1,863,581,952	574,297,777	7,529,207	85,274	2,445,494,210
Net Position Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	24,244,554,125	2,743,413,081	94,029,915	1,276,810	27,083,273,931
End of Year	\$ 26,108,136,077	\$ 3,317,710,858	\$ 101,559,122	\$ 1,362,084	\$ 29,528,768,141

The Combining Statement of Changes in Fiduciary Net Position-Other Funds is presented on page 21.

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

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For The Fiscal Year Ended June 30, 2023

	Retirement Annuity Trust	Health Insurance Trust	Life Insurance Trust	Other Funds	Total
ADDITIONS					
Contributions					
State of Kentucky	\$ 1,042,434,014	\$ 85,328,285	\$ 2,599,486	\$ -	\$ 1,130,361,785
Others Employers	102,014,792	123,487,533	624,074	218,241	226,344,640
Members	366,774,504	149,209,656	-	9,575	515,993,735
Total Contributions	<u>1,511,223,310</u>	<u>358,025,474</u>	<u>3,223,560</u>	<u>227,816</u>	<u>1,872,700,160</u>
Investment Income (Loss)					
Net Appreciation (Depreciation) in Fair Value of Investments	1,883,455,471	211,338,355	7,393,136	49,908	2,102,236,870
Interest	199,435,778	26,865,804	858,773	23,270	227,183,625
Dividends	236,967,990	13,255,682	665,226	7,527	250,896,425
Rental Income, Net	22,628,975	-	-	-	22,628,975
Securities Lending, Gross Earnings	30,155,932	-	828,198	10,371	30,994,501
Gross Investment Income (Loss)	<u>2,372,644,146</u>	<u>251,459,841</u>	<u>9,745,333</u>	<u>91,076</u>	<u>2,633,940,396</u>
Less: Investment Expense	(78,893,843)	(8,407,600)	(285,154)	-	(87,586,597)
Less: Securities Lending Expense	(27,665,143)	-	(777,694)	(9,678)	(28,452,515)
Net Investment Income (Loss)	<u>2,266,085,160</u>	<u>243,052,241</u>	<u>8,682,485</u>	<u>81,398</u>	<u>2,517,901,284</u>
Total Additions	<u>3,777,308,470</u>	<u>601,077,715</u>	<u>11,906,045</u>	<u>309,214</u>	<u>4,390,601,444</u>
DEDUCTIONS					
Benefits	2,391,326,201	-	6,219,000	147,867	2,397,693,068
Refunds of Contributions	26,909,781	-	-	-	26,909,781
Insurance Expenses	-	124,866,005	-	-	124,866,005
Administrative Expense	14,470,733	1,974,318	37,633	895	16,483,579
Total Deductions	<u>2,432,706,715</u>	<u>126,840,323</u>	<u>6,256,633</u>	<u>148,762</u>	<u>2,565,952,433</u>
Net Increase (Decrease)	1,344,601,755	474,237,392	5,649,412	160,452	1,824,649,011
Net Position Restricted for Pension and Other Postemployment Benefits					
Beginning of Year	<u>22,899,952,370</u>	<u>2,269,175,689</u>	<u>88,380,503</u>	<u>1,116,358</u>	<u>25,258,624,920</u>
End of Year	<u>\$ 24,244,554,125</u>	<u>\$ 2,743,413,081</u>	<u>\$ 94,029,915</u>	<u>\$ 1,276,810</u>	<u>\$ 27,083,273,931</u>

The Combining Statement of Changes in Fiduciary Net Position-Other Funds is presented on page 22.

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

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
COMBINING STATEMENT OF FIDUCIARY NET POSITION**

OTHER FUNDS

As Of Fiscal Year Ended June 30, 2024

	403(b) Tax- Sheltered Trust	Supplemental Benefit Fund	Losey Scholarship Fund	Total
Assets				
Cash	\$ 29,197	\$ 161,304	\$ -	\$ 190,501
Receivables				
Investment Income	1,392	-	3,047	4,439
Investments at Fair Value				
Short-term Investments	326,682	-	47,581	374,263
Fixed Income	-	-	202,656	202,656
Equity	-	-	595,103	595,103
Total Investments	<u>326,682</u>	<u>-</u>	<u>845,340</u>	<u>1,172,022</u>
Total Assets	<u>357,271</u>	<u>161,304</u>	<u>848,387</u>	<u>1,366,962</u>
Liabilities				
Due to Other Trusts	94	4,224	560	4,878
Total Liabilities	<u>94</u>	<u>4,224</u>	<u>560</u>	<u>4,878</u>
Net Position Restricted for Pension and Other Postemployment Benefits				
	<u>\$ 357,177</u>	<u>\$ 157,080</u>	<u>\$ 847,827</u>	<u>\$ 1,362,084</u>

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
COMBINING STATEMENT OF FIDUCIARY NET POSITION**

OTHER FUNDS

As Of Fiscal Year Ended June 30, 2023

	403(b) Tax- Sheltered Trust	Supplemental Benefit Fund	Losey Scholarship Fund	Total
Assets				
Cash	\$ 10,825	\$ 200,874	\$ -	\$ 211,699
Receivables				
Investment Income	1,280	-	3,100	4,380
Investments at Fair Value				
Short-term Investments	312,005	-	44,514	356,519
Fixed Income	-	-	214,946	214,946
Equity	-	-	493,746	493,746
Total Investments	<u>312,005</u>	<u>-</u>	<u>753,206</u>	<u>1,065,211</u>
Total Assets	<u>324,110</u>	<u>200,874</u>	<u>756,306</u>	<u>1,281,290</u>
Liabilities				
Due to Other Trusts	83	3,945	452	4,480
Total Liabilities	<u>83</u>	<u>3,945</u>	<u>452</u>	<u>4,480</u>
Net Position Restricted for Pension and Other Postemployment Benefits				
	<u>\$ 324,027</u>	<u>\$ 196,929</u>	<u>\$ 755,854</u>	<u>\$ 1,276,810</u>

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

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
OTHER FUNDS
For The Fiscal Year Ended June 30, 2024

	<u>403(b) Tax- Sheltered Trust</u>	<u>Supplemental Benefit Fund</u>	<u>Losey Scholarship Fund</u>	<u>Total</u>
ADDITIONS				
Contributions				
Other Employers	\$ -	\$ -	\$ -	\$ -
Members	17,740	-	-	17,740
Total Contributions	<u>17,740</u>	<u>-</u>	<u>-</u>	<u>17,740</u>
Investment Income (Loss)				
Net Appreciation (Depreciation) in Fair Value of Investments			89,132	89,132
Interest	17,274	6,895	11,459	35,628
Dividends	-	-	9,033	9,033
Securities Lending, Gross	-	-	7,531	7,531
Gross Investment Income (Loss)	<u>17,274</u>	<u>6,895</u>	<u>117,155</u>	<u>141,324</u>
Less: Securities Lending Expense	-	-	(7,075)	(7,075)
Net Investment Income (Loss)	<u>17,274</u>	<u>6,895</u>	<u>110,080</u>	<u>134,249</u>
Total Additions	<u>35,014</u>	<u>6,895</u>	<u>110,080</u>	<u>151,989</u>
DEDUCTIONS				
Benefits	1,856	46,461	18,000	66,317
Administrative Expense	11	279	108	398
Total Deductions	<u>1,867</u>	<u>46,740</u>	<u>18,108</u>	<u>66,715</u>
Net Increase (Decrease)	33,147	(39,845)	91,972	85,274
Net Position Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	324,027	196,929	755,854	1,276,810
End of Year	<u>\$ 357,174</u>	<u>\$ 157,084</u>	<u>\$ 847,826</u>	<u>\$ 1,362,084</u>

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

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
COMBINING STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
For The Fiscal Year Ended June 30, 2023
Other Funds

	403(b) Tax- Sheltered Trust	Supplemental Benefit Fund	Losey Scholarship Fund	Total
ADDITIONS				
Contributions				
Other Employers	\$ 1,203	\$ 217,038	\$ -	\$ 218,241
Members	9,575	-	-	9,575
Total Contributions	<u>10,778</u>	<u>217,038</u>	<u>-</u>	<u>227,816</u>
Investment Income (Loss)				
Net Appreciation (Depreciation) in Fair Value of Investments	11,349	1,194	49,908	49,908
Interest	-	-	10,727	23,270
Dividends	-	-	7,527	7,527
Securities Lending, Gross	-	-	10,371	10,371
Gross Investment Income (Loss)	<u>11,349</u>	<u>1,194</u>	<u>78,533</u>	<u>91,076</u>
Less: Securities Lending Expense	-	-	(9,678)	(9,678)
Net Investment Income (Loss)	<u>11,349</u>	<u>1,194</u>	<u>68,855</u>	<u>81,398</u>
Total Additions	<u>22,127</u>	<u>218,232</u>	<u>68,855</u>	<u>309,214</u>
DEDUCTIONS				
Benefits	2,134	127,733	18,000	147,867
Administrative Expense	14	771	110	895
Total Deductions	<u>2,148</u>	<u>128,504</u>	<u>18,110</u>	<u>148,762</u>
Net Increase (Decrease)	19,979	89,728	50,745	160,452
Net Position Restricted for Pension and Other Postemployment Benefits				
Beginning of Year	304,048	107,201	705,109	1,116,358
End of Year	<u>\$ 324,027</u>	<u>\$ 196,929</u>	<u>\$ 755,854</u>	<u>\$ 1,276,810</u>

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

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NOTES TO FINANCIAL STATEMENTS

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024

NOTE 1: DESCRIPTION OF RETIREMENT ANNUITY TRUST

A. REPORTING ENTITY

The Teachers' Retirement System of the State of Kentucky (TRS or system) was created by the 1938 General Assembly, began operations July 1, 1940, and is governed by Kentucky Revised Statutes (KRS) chapter 161 sections 220 through 990. TRS is a blended component unit of the Commonwealth of Kentucky (Commonwealth or state) and, therefore, is included in the Commonwealth's financial statements. TRS is a cost-sharing multiple-employer defined benefit plan with a special funding situation established to provide retirement, health, and life insurance benefits for specified employees of local school districts and other public educational agencies in the Commonwealth.

KRS 161.250 provides that the general administration and management of TRS, and the responsibility for its proper operation, is vested in a board of trustees. The Board of Trustees consists of the chief state school officer, the state treasurer, two trustees appointed by the governor, and seven elected trustees. Four of the elected trustees are active teachers, two are not members of the teaching profession, and one is an annuitant of the system.

B. PARTICIPANTS

As of June 30, 2024, a total of 202 employers participated in the plan. Employers are comprised of local school districts, Department of Education agencies, universities, the Kentucky Community and Technical College System, and other educational organizations. The state under the Governmental Accounting Standards Board (GASB) Statement Nos. 67 and 74 is recognized as a non-employer contributing entity providing the employer matching contributions for members employed by the local school districts and regional educational cooperatives.

According to KRS 161.220, any regular or special teacher, or professional occupying a position requiring certification or graduation from a four-year college or university is eligible to participate in the system. The following table illustrates the classifications of members.

	<u>2024</u>	<u>2023</u>
Active contributing members:		
Vested	49,652	49,569
Non-vested	26,362	26,075
Inactive members, vested	11,957	11,331
Retirees and beneficiaries currently receiving benefits	<u>60,358</u>	<u>59,559</u>
Total members, retirees and beneficiaries	<u><u>148,329</u></u>	<u><u>146,534</u></u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 1: DESCRIPTION OF RETIREMENT ANNUITY TRUST (Continued)

Because benefits are determined by a member's entry date, throughout this report, each grouping is referred to by a different name.

- TRS 1 is members who entered before July 1, 2002.
- TRS 2 is members who entered on or between July 1, 2002, and June 30, 2008.
- TRS 3 is members who entered on or between July 1, 2008, and December 31, 2021.
- TRS 4 is members who entered on or after January 1, 2022.

C. BENEFIT PROVISIONS

For Members Before July 1, 2008 (TRS 1 and TRS 2):

Members become vested when they complete five years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1. Attain age 55 and complete five years of Kentucky service, or
2. Complete 27 years of Kentucky service.

Non-university members receive monthly payments equal to 2% (service prior to July 1, 1983) and 2.5% (service after July 1, 1983) of their final average salaries for each year of credited service. Non-university members who became members on or after July 1, 2002, will receive monthly benefits equal to 2% of their final average salary for each year of service if, upon retirement, their total service is less than 10 years. New members after July 1, 2002, who retire with 10 or more years of total service will receive monthly benefits equal to 2.5% of their final average salary for each year of service, including the first 10 years. In addition, non-university members who retire July 1, 2004, and later with more than 30 years of service will have a multiplier for all years over 30 of 3%.

University employees receive monthly benefits equal to 2% of their final average salary for each year of credited service.

The final average salary is the member's five highest annual salaries except members at least age 55 with 27 or more years of service may use their three highest annual salaries. For all members, the annual allowance is reduced by 5% per year from the earlier of age 60 or the date the member would have completed 27 years of service. The minimum annual service allowance for all members is \$440 multiplied by credited service.

For Members On or After July 1, 2008, and Before January 1, 2022 (TRS 3):

Members become vested when they complete five years of credited service. To qualify for monthly retirement benefits, payable for life, members must either:

1. Attain age 60 and complete five years of Kentucky service, or
2. Complete 27 years of Kentucky service, or
3. Attain age 55 and complete 10 years of Kentucky service.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 1: DESCRIPTION OF RETIREMENT ANNUITY TRUST (Continued)

The annual retirement allowance for non-university members is equal to: (a) 1.7% of final average salary for each year of credited service if their service is 10 years or less; (b) 2% of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) 2.3% of final average salary for each year of credited service if their service is greater than 20 years but no more than 26 years; (d) 2.5% of final average salary for each year of credited service if their service is greater than 26 years but no more than 30 years; (e) 3% of final average salary for years of credited service greater than 30 years.

The annual retirement allowance for university members is equal to: (a) 1.5% of final average salary for each year of credited service if their service is 10 years or less; (b) 1.7% of final average salary for each year of credited service if their service is greater than 10 years but no more than 20 years; (c) 1.85% of final average salary for each year of credited service if their service is greater than 20 years but less than 27 years; (d) 2% of final average salary for each year of credited service if their service is greater than or equal to 27 years.

The final average salary is the member's five highest annual salaries except members at least age 55 with 27 or more years of service may use their three highest annual salaries. For all members, the annual allowance is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 27 years of service.

For Members On or After January 1, 2022 (TRS 4):

To qualify for monthly retirement benefits, payable for life, members must either:

1. Attain age 57 and complete ten years of Kentucky service, or
2. Attain age 65 and complete five years of Kentucky service.

Foundational Benefit

The annual foundational benefit for members is equal to service times a multiplier times final average salary. The final average salary is the member's five highest annual salaries. The annual foundational benefit is reduced by 6% per year from the earlier of age 60 or the date the member would have completed 30 years of service.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 1: DESCRIPTION OF RETIREMENT ANNUITY TRUST (Continued)

The multiplier for non-university members is shown in the following table:

Age	Years of Service			
	5-9.99	10-19.99	20-29.99	30 or more
57-60		1.70%	1.95%	2.20%
61		1.74%	1.99%	2.24%
62		1.78%	2.03%	2.28%
63		1.82%	2.07%	2.32%
64		1.86%	2.11%	2.36%
65 and over	1.90%	1.90%	2.15%	2.40%

The multiplier for university members is shown in the following table:

Age	Years of Service			
	5-9.99	10-19.99	20-29.99	30 or more
57-60		0.70%	0.95%	1.20%
61		0.74%	0.99%	1.24%
62		0.78%	1.03%	1.28%
63		0.82%	1.07%	1.32%
64		0.86%	1.11%	1.36%
65 and over	0.90%	0.90%	1.15%	1.40%

Supplemental Benefit

The annual supplemental benefit is equal to the account balance that includes member and employer contributions and interest credited annually on June 30. Options include annuitizing the balance or receiving the balance or a portion thereof as a lump sum either at the time of retirement or at a later date.

Other Benefits

TRS provides postemployment health insurance benefits to retirees as fully described in Note 8. For members who began participating prior to Jan. 1, 2022, TRS also provides disability benefits for vested members at the rate of 60% of the final average salary. TRS 4 members will receive a disability benefit to be determined by the board through administrative regulation.

A life insurance benefit payable upon the death of a member, also described in Note 9, is \$2,000 for active contributing members and \$5,000 for retired or disabled members for members who began participating before Jan. 1, 2022. For TRS 4 members, the life insurance benefit payable upon the death of a member is \$5,000 for active contributing members and \$10,000 for retired or disabled members.

Cost of living increases as provided by law are 1.5% annually. Additional ad hoc increases and any other benefit amendments are provided if authorized by the General Assembly.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. BASIS OF ACCOUNTING

The financial statements are prepared on the accrual basis of accounting. Member contributions and employer matching contributions are recognized in the fiscal year due. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

B. CASH

TRS has seven cash accounts. At June 30, 2024, the Retirement Annuity Cash account totaled \$187.8 million, the Control Cash Account totaled \$71.7 million and the Capital Project Cash Account totaled \$274,003 for a total of \$260 million as carrying value of cash in the retirement trust. The Health Insurance's Internal Revenue Code Sec. 115 (IRC 115) Trust Cash Account totaled \$154.1 million and the Health Insurance 401(h) Cash Account totaled \$5 million for a total of \$159.2 million as carrying value of cash in the Health Insurance Trust. The Life Insurance Trust Cash Account totaled \$484,343. The Supplemental Benefit Fund Cash Account contained \$161,309. The Voluntary Contribution 403(b) Cash Account totaled \$29,197. Therefore, the carrying value of cash was \$419.6 million, and the bank balance was \$451.2 million. The variance is primarily due to outstanding checks and items not processed by the bank as of June 30, 2024.

At June 30, 2023, the Retirement Annuity Cash account totaled \$173.4 million, the Control Cash Account totaled \$82.4 million and the Capital Project Cash Account totaled \$274,003 for a total of \$256 million as carrying value of cash in the retirement trust. The Health Insurance's Internal Revenue Code Sec. 115 (IRC 115) Trust Cash Account totaled \$292.4 million and the Health Insurance 401(h) Cash Account totaled \$8.1 million for a total of \$300.5 million as carrying value of cash in the Health Insurance Trust. The Life Insurance Trust Cash Account totaled \$490,418. The Supplemental Benefit Fund Cash Account contained \$200,875. Therefore, the carrying value of cash was \$557.2 million, and the bank balance was \$579.2 million. The variance is primarily due to outstanding checks and items not processed by the bank as of June 30, 2023.

C. CAPITAL ASSETS

Property and equipment are carried at cost, less accumulated depreciation. Buildings, improvements to land, and equipment are capitalized when the acquisition is \$5,000 or greater. Intangible capital assets are capitalized when the cost is \$100,000 or more, except software, which has a threshold of \$500,000. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from five to 40 years in the following major classes: office furniture and equipment, five years; other equipment, five years; computer software, 10 years; and TRS office buildings, 40 years. Pathway replaced TRS's legacy computer system and is TRS's primary business information technology system. Pathway was capitalized and is being amortized or depreciated over 10 years.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

D. INVESTMENTS

Plan investments are reported at fair value. Fair value is the amount that a plan can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller. Short-term securities are carried at cost, which approximates fair value. Fixed income and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges and securities pricing services. Real estate is primarily valued based on appraisals performed by independent appraisers. Other investments, such as private equity, timberland, real estate funds, and other additional categories, are valued using the most recent general partner statement at net asset value. Examples of other additional categories are opportunistic credit, high yield bonds, and direct lending.

Purchase and sales of debt securities, equity securities, and short-term investments are recorded on the trade date. Real estate equity transactions are recorded on the settlement date. Upon sale of investments, the difference between sales proceeds and cost is reflected in the statement of changes in fiduciary net position. Investment expenses consist of investment manager and consultant fees along with fees for custodial services.

E. COMPENSATED ABSENCES

Expenses for accumulated vacation days and compensatory time earned by TRS's employees are recorded when earned. Upon termination or retirement, employees of TRS are paid for accumulated vacation time limited to 60 days and accumulated compensatory time limited to 240 hours. As of June 30, 2024 and 2023, accrued compensated absences were included in accrued expenses and other liabilities on the statements of fiduciary net position amounting to \$2.5 million and \$2.2 million, respectively.

F. RISK MANAGEMENT

Destruction of assets, theft, employee injuries, and court challenges to administrative policy are among the various risks to which TRS is exposed. In order to cover such risks, TRS carries appropriate insurance policies, such as fire and tornado, employee bonds, fiduciary liability, worker's compensation, and equipment insurance.

G. OTHER RECEIVABLES

In the Retirement Annuity Trust, other receivables consist primarily of installment contract receivables. TRS allows qualified purchases of service credit to be made by installment payments that are not to exceed a five-year period. Revenue is recognized in the initial year of the installment agreement. The June 30, 2024, other receivables in the retirement trust were \$26,965 and \$40,625 in 2023.

In the Health Insurance Trust, other receivables consist primarily of Medicare subsidies and formulary rebates accrued, but not received. The June 30, 2024, other receivables in the health trust were \$50 million and \$47 million in 2023.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 2: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

H. ACCRUED EXPENSES AND OTHER PAYABLES

TRS's accrued expenses and other payables consist primarily of administrative expenses incurred but not paid at year end and also from the state paying estimated retirement and health insurance contributions from the enacted budget that was in excess of actual contributions required.

I. USE OF ESTIMATES

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates. The most significant estimates impacting the financial statements relate to the actuarial assumptions.

J. INCOME TAXES

The Retirement Annuity Trust is organized as a tax-exempt retirement plan under the Internal Revenue Code. The 403(b) Tax-Sheltered Trust no longer accepts contributions and will be fully terminated when all lifetime annuities have expired. TRS's management believes that it has operated the plans within the constraints imposed by federal tax law.

NOTE 3: CONTRIBUTIONS AND FUNDS OF THE PLAN

A. CONTRIBUTIONS

Contribution rates are established by Kentucky Revised Statutes. For members who began participating before Jan. 1, 2022, non-university members are required to contribute 12.855% of their salaries to the system; university members are required to contribute 10.4% of their salaries. KRS 161.565 allows each university to reduce the contribution of its members by 2.215%; therefore, university members contribute 8.185% of their salary to TRS. For members employed by local school districts, the state (as a non-employer contributing entity) contributes 13.105% of the salary for those who joined before July 1, 2008, and 14.105% for those who joined on or after July 1, 2008, and before Jan. 1, 2022. Other participating employers are required to contribute the percentage contributed by members plus an additional 3.25% of members' gross salaries.

For TRS 4 members, non-university members contribute 14.75% and university members contribute 9.775% of their salaries to the system. Employers of non-university members, including the state (as a non-employer contributing entity), contribute 10.75% of their salary. University employers contribute 9.775% of member's salary to the system.

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS****June 30, 2024****(Continued)****NOTE 3: CONTRIBUTIONS AND FUNDS OF THE PLAN (Continued)**

The member and employer contributions consist of retirement annuity contributions and OPEB contributions to the health insurance and life insurance trusts. The member postemployment health insurance contribution is 3.75% of their salary. The employer postemployment health insurance contribution is 0.75% of member salaries. Also, employers (other than the state) contribute 3% of members' salaries and the state contributes the net cost of health insurance premiums for new retirees after June 30, 2010, in the non-Medicare eligible group. If a member leaves covered employment before accumulating five years of credited service, accumulated member contributions to the retirement trust are refunded with interest upon the member's request.

B. FUNDS OF THE PLAN**Teacher Savings Fund:**

KRS 161.420(2) establishes the Teacher Savings Fund consisting of contributions paid by university and non-university members. The fund also includes interest authorized by the Board of Trustees from the Guarantee Fund (described below). The accumulated contributions of members that are returned upon withdrawal or paid to the estate or designated beneficiary in the event of death are paid from this fund. Upon retirement, the member's contributions and the matching state contributions are transferred from this fund to the Allowance Reserve Fund, the fund (also described below) from which retirement benefits are paid.

State Accumulation Fund:

KRS 161.420(3) establishes the State Accumulation Fund, which receives state appropriations to the system. The state matches an amount equal to members' contributions. State appropriations during the year are based on estimates of members' salaries. At year-end when actual salaries are known, the required state matching also is realized by producing either a receivable from or a payable to the state.

Allowance Reserve Fund:

KRS 161.420(4) establishes the Allowance Reserve Fund, which is the source for retirement, disability, and survivor benefits paid to TRS members. These benefits are paid from the retired members' contributions until they are exhausted, at which time state matching contributions are used to pay the benefits. After an individual member's contributions and the state matching contributions have been exhausted, retirement benefits are paid from monies transferred from the Guarantee Fund (described below).

Guarantee Fund:

KRS 161.420(6) establishes the Guarantee Fund to collect income from investments, state matching contributions of members withdrawn from the system, and state matching contributions for cost-of-living adjustments (COLAs). In addition, it receives money for which disposition is not otherwise provided. This fund provides interest to the other funds, benefits in excess of both members' and state matching contributions, monies for administrative expenses of TRS and deficiencies not covered by the other funds.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 3: CONTRIBUTIONS AND FUNDS OF THE PLAN (Continued)

Expense Fund:

KRS 161.420(1) establishes the Expense Fund for administrative expenses. Investment income transferred to this fund from the Guarantee Fund is used to pay the administrative expenses of TRS. Administrative expenses are allocated among the funds based on benefits paid.

NOTE 4: NET PENSION LIABILITY OF EMPLOYERS

A. NET PENSION LIABILITY OF EMPLOYERS

The net pension liability (i.e., the system's liability determined in accordance with GASB Statement 67 less the fiduciary net position) as of June 30, 2024 and 2023 follows.

Schedule of Net Pension Liability of Employers
(In Thousands)

Fiscal Year	Total Pension Liability	Plan Fiduciary Net Position	Employers Net Pension Liability	Plan Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a % of Covered Payroll
June 30	A	B	(A-B)	(B/A)	C	[(A-B)/C]
2024	\$ 43,251,404	\$ 26,108,136	\$ 17,143,268	60.4%	\$ 4,140,446	414.0%
2023	42,029,935	24,244,554	17,785,381	57.7%	3,977,280	447.2%

B. SUMMARY OF ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation follows.

Valuation Date	June 30, 2023
Actuarial Cost Method	Entry Age
Investment Rate of Return	7.1%, net of pension plan investment expense, including inflation.
Projected Salary Increases	3 - 7.5%, including inflation
Inflation Rate	2.5%
Post-Retirement adjustment	1.5%
Municipal Bond Index Rate	3.94%
Single Equivalent Interest Rate	7.1%

Mortality rates were based on the Pub2010 (Teachers Benefit-Weighted) Mortality Table projected generationally with MP-2020 with various set-forwards, set-backs, and adjustments for each of the groups; service retirees, contingent annuitants, disabled retirees, and active members. The actuarial assumptions used were based on the results of an actuarial experience study for the 5-year period ending June 30, 2020, adopted by the board on Sept. 20, 2021. The Municipal Bond Index Rate used for this purpose is the June average of the Bond Buyer General Obligation 20-year Municipal Bond Index.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 4: NET PENSION LIABILITY OF EMPLOYERS (Continued)

C. TARGET ALLOCATIONS

The long-term expected rate of return on pension plan investments was determined using a log-normal distribution analysis 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.

A summary of the target allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, follows.

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Long-term Expected Real Rate of Return</u>
U.S. Large Cap Equity	35.4%	5.0%
U.S. Small Cap Equity	2.6%	5.5%
Developed International Equity	15.7%	5.5%
Emerging Markets Equity	5.3%	6.1%
Fixed Income	15.0%	1.9%
High Yield Bonds	2.0%	3.8%
Other Additional Categories	8.0%	3.6%
Real Estate	7.0%	3.2%
Private Equity	7.0%	8.0%
Cash	2.0%	1.6%
Total	<u>100.0%</u>	

D. DISCOUNT RATE

For 2024 and 2023, the discount rate used to measure the total pension liability was 7.1%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made in full at the current contribution rates and the employer contributions will be made at actuarially determined contribution (ADC) rates for all future fiscal years. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 4: NET PENSION LIABILITY OF EMPLOYERS (Continued)

The following table presents TRS's net pension liability for 2024. TRS's 2024 net pension liability is calculated using the discount rate of 7.1%, as well as what the system's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.1%) or one percentage point higher (8.1%) than the current rate.

	2024 (In Thousands)		
	1% Decrease (6.1%)	Current Discount Rate (7.1%)	1% Increase (8.1%)
Net Pension Liability	\$ 22,338,043	\$ 17,143,268	\$ 12,815,031

The following table presents TRS's net pension liability for 2023. TRS's 2023 net pension liability is calculated using the discount rate of 7.1%, as well as what the system's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.1%) or one percentage point higher (8.1%) than the current rate.

	2023 (In Thousands)		
	1% Decrease (6.1%)	Current Discount Rate (7.1%)	1% Increase (8.1%)
Net Pension Liability	\$ 22,852,220	\$ 17,785,381	\$ 13,563,822

June 30, 2023, is the actuarial valuation date upon which the total pension liability (TPL) is based for 2024. An expected TPL is determined as of June 30, 2024, using standard roll forward techniques. The roll-forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year. In addition, the expected TPL as of June 30, 2024, has been determined based on the TPL roll-forward from June 30, 2023. The difference between the two roll-forward amounts as of June 30, 2024, is the experience gain or loss for the year. These procedures are shown in the following table.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 4: NET PENSION LIABILITY OF EMPLOYERS (Continued)

	TPL Roll-Forward 2024 (In Thousands)	
	Expected	Actual
(a) Interest Rate	7.1%	7.1%
(b) Total Pension Liability as of June 30, 2023	\$ 42,029,935	\$ 42,179,888
(c) Entry Age Normal Cost for the Year July 1, 2023 - June 30, 2024	665,383	665,383
(d) Actual Benefit Payments (including refunds) for the Year July 1, 2023 - June 30, 2024	2,499,893	2,499,893
(e) Total Pension Liability as of June 30, 2024 [(b) x (1 + (a))] + (c) - [(d) x (1 + 0.5 x (a))]	43,090,804	43,251,404
(f) Difference Between Expected and Actual Experience (Gain) / Loss		160,600

June 30, 2022, is the actuarial valuation date upon which the TPL is based for 2023. An expected TPL is determined as of June 30, 2023, using standard roll-forward techniques for the actual TPL both before and after the assumption changes due to the experience study and the reduction in the assumed investment rate of return. The difference between these two amounts is shown as a change in assumptions. The roll-forward calculation adds the annual normal cost (also called the service cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year. The expected TPL as of June 30, 2022, has been determined based on the TPL roll-forward from June 30, 2021. The difference between the two roll-forward amounts as of June 30, 2023, is the experience gain or loss. The procedures are shown in the following table.

	TPL Roll-Forward 2023 (In Thousands)	
	Expected	Actual
(a) Interest Rate	7.1%	7.1%
(b) Total Pension Liability as of June 30, 2022	\$ 40,598,288	\$ 40,970,441
(c) Entry Age Normal Cost for the Year July 1, 2022 - June 30, 2023	654,676	654,676
(d) Actual Benefit Payments (including refunds) for the Year July 1, 2022 - June 30, 2023	2,418,236	2,418,236
(e) Total Pension Liability as of June 30, 2023 [(b) x (1 + (a))] + (c) - [(d) x (1 + 0.5 x (a))]	41,631,359	42,029,935
(f) Difference Between Expected and Actual Experience (Gain) / Loss		398,576

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS)

A. LEGAL PROVISIONS FOR INVESTMENTS

The following disclosures are meant to help the users of the financial statements for the Teachers' Retirement System of the State of Kentucky (TRS or system) assess the risks TRS takes in investing member funds. The Board of Trustees and the Investment Committee are guided by asset allocation parameters that the board approves through its powers as defined in KRS 161.430.

TRS administers a Retirement Annuity Trust, Health Insurance Trust, and Life Insurance Trust in accordance with state and federal law. TRS provides benefits for service and disability retirements; death and survivors; retiree health insurance; and life insurance for Kentucky public education employees and their beneficiaries.

The asset allocation parameters for the retirement annuity and life insurance trusts are set forth in 102 Kentucky Administrative Regulations (KAR) 1:175, sections 2 and 3 as follows:

- There shall be no limit on the amount of investments owned if the investments are guaranteed by the U.S. government.
- Not more than 35% of the assets at fair value shall be invested in corporate debt obligations.
- Not more than 10% of the assets at fair value shall be invested in foreign debt.
- Not more than 65% of the assets at fair value shall be invested in common stocks or preferred stocks.
- Not more than 25% of the assets at fair value shall be invested in a stock portfolio designed to replicate a general stock index.
- Not more than 30% of the assets at fair value shall be invested in the stocks of companies domiciled outside of the United States; any amounts so invested shall be included in the 65% limitation for total stocks.
- Not more than 10% of the assets at fair value shall be invested in real estate. This would include real estate equity, real estate lease agreements, and shares in real estate investment trusts.
- Not more than 10% of the assets at fair value shall be invested in alternative investments. This category may include private equity, venture capital, timberland, and infrastructure investments.
- Not more than 15% of the assets at fair value shall be invested in any additional category or categories of investments. The board shall approve by resolution such additional category or categories of investments.

The asset allocation parameters for the Health Insurance Trust fund are set forth in 102 KAR 1:178, section 2 as follows:

- In order to preserve the assets and produce the required rate of return while minimizing risk, assets shall be prudently diversified among various classes of investments.
- In determining asset allocation policy, the investment committee and the board shall be mindful of the trust's liquidity and its capability of meeting both short and long-term obligations.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

B. CASH AND CASH EQUIVALENTS

For cash deposits and cash equivalents, custodial credit risk is the risk that, in the event of a bank failure, TRS's deposits may not be returned to the system. TRS's total cash balance held at J.P. Morgan Chase bank on June 30, 2024, was \$451.2 million. TRS's total cash balance held at J.P. Morgan Chase on June 30, 2023, was \$579.2 million.

Deposits are exposed to custodial credit risk if they are not covered by depository insurance and the deposits are:

- a. uncollateralized,
- b. collateralized with securities held by the pledging financial institution, or
- c. collateralized with securities held by the pledging financial institution's trust department or agent but not in the depositor-government's name.

As of June 30, 2024, TRS's cash balance of \$451.2 million was not exposed to custodial credit risk because this amount was collateralized fully with a letter of credit in the amount of \$837.0 million.

As of June 30, 2023, TRS's cash balance of \$579.2 million was not exposed to custodial credit risk because this amount was collateralized fully with a letter of credit in the amount of \$896.0 million.

C. INVESTMENTS

All of TRS's assets are invested in short-term and long-term debt (bonds and mortgages) securities, equity (stock) securities, real estate, alternative investments and additional categories as permitted by regulation. These assets are reported at fair value.

Investments are governed by the board's policies. The board and the Investment Committee execute their fiduciary responsibilities in accordance with the prudent person rule, as identified in KRS 161.430 (2)(b). The prudent person rule establishes a standard for all fiduciaries to act as a prudent person would be expected to act, with the "care, skill, prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims."

The following charts represent the fair values of TRS's investments for June 30, 2024, and 2023.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Schedule of Investments Retirement Annuity Trust		
	<u>Fair Value June 30, 2024</u>	<u>Fair Value June 30, 2023</u>
Short-term Investments		
Cash and Cash Equivalents	\$ 573,009,827	\$ 568,929,242
Subtotal	<u>573,009,827</u>	<u>568,929,242</u>
Fixed Income		
U.S. Government	1,176,368,260	1,139,162,191
Agency Bonds	161,249,891	94,136,785
Mortgage-backed Securities	240,078,003	113,404,191
Asset-backed Securities	50,756,369	28,882,848
Commercial Mortgage-backed Securities	25,435,379	26,589,385
Collateralized Mortgage Obligations	81,159,339	21,467,875
Municipal Bonds	251,982,003	274,771,116
Corporate Bonds	<u>1,357,883,192</u>	<u>1,273,746,115</u>
Subtotal	<u>3,344,912,436</u>	<u>2,972,160,506</u>
Equity		
International Equity	5,364,347,801	4,861,620,374
U.S. Equity	<u>10,011,151,129</u>	<u>9,426,516,493</u>
Subtotal	<u>15,375,498,930</u>	<u>14,288,136,867</u>
Real Estate	1,712,653,006	1,777,282,982
Private Equity	2,079,165,274	1,915,329,613
Additional Categories		
Asset-backed Securities	2,116,571	-
Opportunistic Credit	984,215,116	753,842,564
Corporate Bonds	807,662,120	753,292,803
Corporate Loans	393,777,924	413,242,921
Timberland	495,357,296	485,158,413
U.S. Government	<u>4,965,250</u>	<u>7,901,520</u>
Subtotal	<u>2,688,094,277</u>	<u>2,412,438,221</u>
Total*	<u>\$ 25,773,333,750</u>	<u>\$ 23,934,277,431</u>

**This schedule includes the 403(b) Tax Shelter fund and Losey Scholarship fund.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Schedule of Investments
Health Insurance Trust

	<u>Fair Value</u> <u>June 30, 2024</u>	<u>Fair Value</u> <u>June 30, 2023</u>
Short-term Investments		
Cash and Cash Equivalents	\$ 190,546,793	\$ 77,221,128
Subtotal	<u>190,546,793</u>	<u>77,221,128</u>
Fixed Income		
U.S. Government	78,506,530	43,405,938
Agency Bonds	37,978,380	2,989,020
Mortgage-backed Securities	3,046,296	3,051,772
Collateralized Mortgage Obligations	1,777,731	824,263
Municipal Bonds	9,078,875	9,109,099
Corporate Bonds	<u>116,740,818</u>	<u>93,762,993</u>
Subtotal	<u>247,128,630</u>	<u>153,143,085</u>
Equity		
International Equity	673,063,283	486,604,691
U.S. Equity	<u>1,150,152,092</u>	<u>919,910,248</u>
Subtotal	<u>1,823,215,375</u>	<u>1,406,514,939</u>
Real Estate	156,478,824	159,444,210
Private Equity	246,078,333	220,197,307
Additional Categories		
Asset-backed Securities	522,328	-
Opportunistic Credit	166,780,267	119,854,518
Corporate Bonds	221,414,109	191,497,563
Corporate Loans	93,647,956	79,273,882
U.S. Equity	<u>6,634,499</u>	<u>6,457,974</u>
Subtotal	<u>488,999,159</u>	<u>397,083,937</u>
Total	<u>\$ 3,152,447,114</u>	<u>\$ 2,413,604,606</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Schedule of Investments
Life Insurance Trust

	<u>Fair Value</u> <u>June 30, 2024</u>	<u>Fair Value</u> <u>June 30, 2023</u>
Short-term Investments		
Cash and Cash Equivalents	\$ 4,919,258	\$ 5,069,152
Subtotal	4,919,258	5,069,152
Fixed Income		
U.S. Government	7,949,101	8,591,791
Mortgage-backed Securities	182,162	199,079
Municipal Bonds	2,274,478	2,340,986
Corporate Bonds	6,353,105	6,810,627
Subtotal	16,758,846	17,942,483
Equity		
International Equity	21,403,450	19,667,059
U.S. Equity	41,377,043	36,515,893
Subtotal	62,780,493	56,182,952
Real Estate	7,037,595	6,513,395
Private Equity	6,429,611	4,921,166
Additional Categories		
Opportunistic Credit	2,338,090	2,102,984
U.S. Equity	710,803	692,720
Subtotal	3,048,893	2,795,704
Total	<u>\$ 100,974,696</u>	<u>\$ 93,424,852</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

D. CUSTODIAL CREDIT RISK

Custodial credit risk for an investment is the risk that, in the event of the failure of a counterparty, TRS will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the system and are held by either:

- a. The counterparty or,
- b. The counterparty's trust department or agent, but not in the system's name.

The cash reserve of TRS is maintained primarily in high quality short-term investments through the Dreyfus Institutional Cash Advantage Fund. This fund invests in a diversified portfolio of high quality, short-term debt securities, and the fund is rated AAA by S&P, Moody's and Fitch. The fund's portfolio is structured within the confines of Rule 2a-7 under the Investment Company Act of 1940. Permissible investments within this fund include commercial paper; U.S. Treasury and agency obligations; certificates of deposit; bankers' acceptances; repurchase agreements; and time deposits.

Whenever repurchase agreements are ordered by TRS under the terms of master repurchase agreements with various brokers, the terms are dictated by TRS. The repurchase agreements and their supporting collateral are held by the custodial agent's correspondent bank in an account identified by the custodian's name and TRS's nominee name. This account is unique to TRS. The master repurchase agreements require that the supporting collateral have a fair value of at least 102% of the value of the repurchase agreements.

As of June 30, 2024, cash collateral reinvestment securities acquired through securities lending for the Retirement Annuity Trust by TRS's custodian amounted to \$1.14 billion in relation to the \$1.11 billion securities lent consistent with the lending agreement with the custodian. Cash collateral reinvestment securities lending for the Life Insurance Trust by TRS's custodian amounted to \$5.6 million in relation to the \$5.5 million securities lent consistent with the lending agreement with the custodian. The custodian also is the lending agent and counterparty.

E. INTEREST RATE RISK

Interest rate risk on investments is the possibility that changes in interest rates will reduce the fair value of TRS's investments. In general, the longer the period until an investment matures, the greater the risk of a negative impact on fair value resulting from changes in interest rates.

As of June 30, 2024, and 2023, the Retirement Annuity Trust, Health Insurance Trust, and Life Insurance Trust had the following investment fair value and weighted average maturities.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Retirement Annuity Trust

Investment Type	2024			2023		
	Fixed Income	Additional Categories	Average Maturity (Years)	Fixed Income	Additional Categories	Average Maturity (Years)
U.S. Government	\$ 1,176,368,260	\$ 4,965,250	10.9	\$ 1,139,162,191	\$ 7,901,520.00	10.05
Agency Bonds	161,249,891	-	15.25	94,136,785	-	3.87
Mortgage-backed Securities	240,078,003	-	17.77	113,404,191	-	15.29
Asset-backed Securities	50,756,369	2,116,571	18.42	28,882,848	-	18.17
Commercial Mortgage-backed Securities	25,435,379	-	17.53	26,589,385	-	18.3
Collateralized Mortgage Obligations	81,159,339	-	20.72	21,467,875	-	7.42
Municipal Bonds	251,982,003	-	10.56	274,771,116	-	10.43
Corporate Bonds	1,357,883,192	807,662,120	7.81	1,273,746,115	752,292,803	8.83
Corporate Loans	-	393,777,924	4.38	-	350,424,229	4.18
Total	\$ 3,344,912,436	\$ 1,208,521,865	9.66	\$ 2,972,160,506	\$ 1,110,618,552	9.07

Health Insurance Trust

Investment Type	2024			2023		
	Fixed Income	Additional Categories	Average Maturity (Years)	Fixed Income	Additional Categories	Average Maturity (Years)
U.S. Government	\$ 78,506,530	\$ -	6.15	\$ 43,405,938	\$ -	5.57
Agency Bonds	37,978,380	-	17.15	2,989,020	-	0.53
Mortgage-backed Securities	3,046,296	-	14.56	3,051,772	-	15.62
Asset-backed Securities	-	522,328	17.38	-	-	-
Collateralized Mortgage Obligations	177,731	-	7.08	824,263	-	6.33
Municipal Bonds	9,078,875	-	6.59	910,909	-	7.47
Corporate Bonds	116,740,818	221,414,109	5.34	93,762,993	191,497,563	4.40
Corporate Loans	-	93,647,956	4.51	-	63,569,209	4.33
Total	\$ 247,128,630	\$ 315,584,393	6.20	\$ 153,143,085	\$ 255,066,772	4.64

Life Insurance Trust

Investment Type	2024			2023		
	Fixed Income	Additional Categories	Average Maturity (Years)	Fixed Income	Additional Categories	Average Maturity (Years)
U.S. Government	\$ 7,949,101	\$ -	8.37	\$ 8,591,791	\$ -	9.42
Mortgage-backed Securities	182,162	-	10.48	199,079	-	11.43
Municipal Bonds	2,274,478	-	5.71	2,340,986	-	6.70
Corporate Bonds	6,353,105	-	9.93	6,810,627	-	10.38
Total	\$ 16,758,846	\$ -	8.62	\$ 17,942,483	\$ -	9.45

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

In addition to the above securities, TRS held short-term cash investments in the Dreyfus Institutional Cash Advantage Fund and at the Bank of New York Mellon (BNYM), with a total fair value of \$768.5 million and a weighted average maturity of 44 days. Average maturity is used as a measure of a security's exposure to interest rate risk due to fluctuations in market interest rates. Mortgage-backed securities and collateralized mortgage obligations typically are amortizing investments with an average life and interest rate risk significantly less than suggested by the legal maturity. Mortgage-backed securities, which generally are prepayable, and other callable bonds are subject to adverse changes in average life in response to market interest rate changes. The schedule above reflects only the legal maturity of all such bonds.

Interest rate risk is the risk that changes in interest rates will affect adversely the fair value of an investment. This risk is managed by using the effective duration or option adjusted methodology to quantify the risk of interest rate changes. This methodology takes into account options on bonds and scales the risk of price changes on bonds depending upon the degree of changes in rates and the slope of the yield curve. The control of interest rate risk is not set forth in a particular policy; however, the system manages interest rate risk in practice by establishing appropriate benchmarks for its various portfolios.

Mortgage-backed securities are securities representing pass-through interests in the cash flows from pools of mortgage loans on single-family or multi-family residential properties. All of the mortgage-backed securities owned by TRS were securitized and are guaranteed by Fannie Mae, Freddie Mac, or Government National Mortgage Association (GNMA). The average life of a mortgage-backed security depends upon the level of prepayments experienced in the underlying pool of loans. Market interest rates are a primary determinant of prepayment levels. Lower-than-anticipated market rates generally lead to higher-than-anticipated prepayments and a shorter average life; higher-than-anticipated market rates generally lead to lower-than-anticipated prepayments and a longer average life. The Retirement Annuity Trust held \$240.1 million in mortgage-backed securities as of June 30, 2024, compared to \$113.4 million as of June 30, 2023. The Health Insurance Trust held \$3.0 million in mortgage-backed securities as of June 30, 2024, compared to \$3.1 million as of June 30, 2023. The Life Insurance Trust held \$182,162 in mortgage-backed securities as of June 30, 2024, compared to \$199,079 as of June 30, 2023.

Collateralized mortgage obligations are bonds that are collateralized by whole loan mortgages, mortgage pass-through securities, or stripped mortgage-backed securities. Income is derived from payments and prepayments of principal and interest generated from collateral mortgages. Cash flows are distributed to different investment classes in accordance with collateralized mortgage obligations' established payment order. The Retirement Annuity Trust held \$81.2 million in collateralized mortgage obligations as of June 30, 2024, compared to \$21.5 million as of June 30, 2023. The Health Insurance Trust held \$1,777,731 in collateralized mortgage obligations as of June 30, 2024, compared to \$824,263 as of June 30, 2023.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Asset-backed securities are bonds or notes backed by loan paper or accounts receivables originated by banks, credit card companies, or other credit providers and are considered to be moderately sensitive to changes in interest rates. The originator of the loan or accounts receivable paper sells it to a specially created trust, which repackages it as securities. Asset-backed securities have been structured as pass-throughs and as structures with multiple bond classes. The Retirement Annuity Trust held 52.9 million in asset-backed securities as of June 30, 2024, compared to 28.9 million as of June 30, 2023. The Health Insurance Trust held \$522,328 in asset-backed securities as of June 30, 2024, compared to \$0 as of June 30, 2023.

Commercial mortgage-backed securities represent interests in the cash flows from pools of mortgage loans on commercial properties. The interests in a securitized pool of loans are divided generally into various tranches based upon planned payment order and level of seniority. TRS's commercial mortgage-backed securities consist of highly rated, relatively senior tranches. The average maturity of TRS's commercial mortgage-backed securities in the schedule above reflects the legal maturity of these holdings. Most of the tranches held are earlier in the planned payment order than the legal maturity suggests. The Retirement Annuity Trust held \$25.4 million in commercial mortgage-backed securities investments as of June 30, 2024, compared to \$26.6 million as of June 30, 2023.

F. CREDIT RISK

Credit risk is the risk that an issuer or counterparty to an investment will not fulfill its obligations. The following schedules list TRS's fixed income investment fair value (net of cash equivalents) according to credit ratings as of June 30, 2024, and 2023.

2024 Retirement Annuity Trust

Rating	Fixed Income	Additional Categories	Total	Percent
U.S. Government	\$ 1,176,368,260	\$ 4,965,250	\$ 1,181,333,510	25.94%
AAA	147,113,433	-	147,113,433	3.23%
AA	811,810,517	-	811,810,517	17.83%
A	547,038,476	4,861,678	551,900,154	12.12%
BBB	536,909,983	72,879,326	609,789,309	13.39%
BB	10,565,314	541,404,068	551,969,382	12.12%
B	-	451,704,513	451,704,513	9.92%
CCC	-	48,690,063	48,690,063	1.07%
CC	-	325,386	325,386	0.01%
C	-	-	-	0.00%
D	-	486,109	486,109	0.01%
Not Rated	115,106,453	83,205,472	198,311,925	4.36%
Total	\$ 3,344,912,436	\$ 1,208,521,865	\$ 4,553,434,301	100%

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

2023 Retirement Annuity Trust

<u>Rating</u>	<u>Fixed Income</u>	<u>Additional Categories</u>	<u>Total</u>	<u>Percent</u>
U.S. Government	\$ 1,139,162,191	\$ 7,901,520	\$ 1,147,063,711	28.09%
AAA	173,792,573	-	173,792,573	4.26%
AA	553,239,834	-	553,239,834	13.55%
A	515,146,109	391,717	515,537,826	12.63%
BBB	523,350,414	54,030,118	577,380,532	14.14%
BB	6,913,711	495,507,018	502,420,729	12.31%
B	-	437,919,734	437,919,734	10.72%
CCC	-	49,603,809	49,603,809	1.21%
CC	-	249,000	249,000	0.01%
C	-	-	-	0.00%
D	-	1,545,507	1,545,507	0.04%
Not Rated	60,555,674	63,470,129	124,025,803	3.04%
Total	<u>\$ 2,972,160,506</u>	<u>\$ 1,110,618,552</u>	<u>\$ 4,082,779,058</u>	<u>100%</u>

2024 Health Insurance Trust

<u>Rating</u>	<u>Fixed Income</u>	<u>Additional Categories</u>	<u>Total</u>	<u>Percent</u>
U.S. Government	\$ 78,506,530	\$ -	\$ 78,506,530	13.95%
AAA	5,055,949	-	5,055,949	0.90%
AA	72,812,681	-	72,812,681	12.94%
A	60,577,319	-	60,577,319	10.77%
BBB	26,808,929	16,423,662	43,232,591	7.68%
BB	-	135,200,349	135,200,349	24.03%
B	-	122,691,955	122,691,955	21.80%
CCC	-	17,753,427	17,753,427	3.15%
CC	-	145,280	145,280	0.03%
C	-	-	-	0.00%
D	-	114,634	114,634	0.02%
Not Rated	3,367,222	23,255,086	26,622,308	4.73%
Total	<u>\$ 247,128,630</u>	<u>\$ 315,584,393</u>	<u>\$ 562,713,023</u>	<u>100%</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

2023 Health Insurance Trust

<u>Rating</u>	<u>Fixed Income</u>	<u>Additional Categories</u>	<u>Total</u>	<u>Percent</u>
U.S. Government	\$ 43,405,938	\$ -	\$ 43,405,938	10.63%
AAA	5,556,616	-	5,556,616	1.36%
AA	32,828,981	-	32,828,981	8.04%
A	45,451,797	129,206	45,581,003	11.16%
BBB	25,899,753	12,253,523	38,153,276	9.35%
BB	-	111,590,871	111,590,871	27.34%
B	-	105,144,906	105,144,906	25.76%
CCC	-	14,778,120	14,778,120	3.62%
CC	-	234,000	234,000	0.06%
C	-	-	-	0.00%
D	-	-	-	0.00%
Not Rated	-	10,936,146	10,936,146	2.68%
Total	<u>\$ 153,143,085</u>	<u>\$ 255,066,772</u>	<u>\$ 408,209,857</u>	<u>100%</u>

2024 Life Insurance Trust

<u>Rating</u>	<u>Fixed Income</u>	<u>Additional Categories</u>	<u>Total</u>	<u>Percent</u>
U.S. Government	\$ 7,949,101	\$ -	\$ 7,949,101	47.43%
AAA	184,458	-	184,458	1.10%
AA	2,630,170	-	2,630,170	15.69%
A	1,020,935	-	1,020,935	6.09%
BBB	3,683,356	-	3,683,356	21.98%
BB	761,788	-	761,788	4.55%
B	-	-	-	0.00%
CCC	-	-	-	0.00%
CC	-	-	-	0.00%
C	-	-	-	0.00%
D	-	-	-	0.00%
Not Rated	529,038	-	529,038	3.16%
Total	<u>\$ 16,758,846</u>	<u>\$ -</u>	<u>\$ 16,758,846</u>	<u>100%</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

2023 Life Insurance Trust

Rating	Fixed Income	Additional Categories	Total	Percent
U.S. Government	\$ 8,591,791	\$ -	\$ 8,591,791	47.88%
AAA	679,711	-	679,711	3.79%
AA	2,738,115	-	2,738,115	15.26%
A	1,093,660	-	1,093,660	6.10%
BBB	4,147,116	-	4,147,116	23.11%
BB	692,090	-	692,090	3.86%
B	-	-	-	0.00%
CCC	-	-	-	0.00%
CC	-	-	-	0.00%
C	-	-	-	0.00%
D	-	-	-	0.00%
Not Rated	-	-	-	0.00%
Total	<u>\$ 17,942,483</u>	<u>\$ -</u>	<u>\$ 17,942,483</u>	<u>100%</u>

Total fair value of the Retirement Annuity Trust's fixed income portfolio was \$4.55 billion on June 30, 2024. The Health Insurance Trust's fixed income portfolio was valued at \$562.7 million on June 30, 2024. Total fair value of the Life Insurance Trust's fixed income portfolio was \$16.8 million on June 30, 2024. Standard & Poor's (S&P) rating system is used in the above charts. For securities where an S&P rating is not provided, another nationally recognized system is used and translated to the S&P rating system.

In addition to the above categories, the Retirement Annuity Trust held \$573.0 million in short-term investments through the Dreyfus Institutional Cash Advantage Fund. The Health Insurance Trust held \$190.5 million in the Dreyfus Institutional Cash Advantage Fund. The Life Insurance Trust held \$4.9 million in the Dreyfus Institutional Cash Advantage Fund. The credit risk associated with this fund is minimal as the securities held are required to maintain the highest possible short-term credit ratings by Moody's and S&P. In addition, investments in U.S. government and agency securities also are highly rated securities since they are backed by the U.S. government. Notation is made that the ratings of securities are subject to change.

The Retirement Annuity Trust's policy on credit rating is set forth in 102 KAR 1:175.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

G. CONCENTRATION OF CREDIT RISK

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. Losses from credit risk are heightened if a significant portion of resources are invested with a single issuer. In compliance with 102 KAR 1:175, the Retirement Annuity Trust has not invested more than 5% of assets at fair value in any single issuer.

H. FOREIGN CURRENCY RISK

Foreign currency risk is the risk that changes in exchange rates will affect adversely the fair value of an investment or a deposit. TRS holdings do not include foreign currency. The foreign currency tables shown are a comparative measure of the value of TRS's foreign investments, like stocks, expressed in U.S. dollars using the conversion rate for that currency on the day the fiscal year ended. As of June 30, 2024, TRS's exposure to foreign currency risk consisted of \$5.51 billion in the Retirement Annuity Trust, \$778.2 million in the Health Insurance Trust, and \$21.1 million in the Life Insurance Trust.

The majority of foreign investments are held in commingled funds managed by UBS Global Asset Management, Baillie Gifford, Baring Asset Management, and BlackRock. In addition to the commingled funds investing in foreign securities, the Retirement Annuity Trust held \$1.12 billion associated with foreign interests in American depository receipt investments. These American depository receipts are securities that are issued by a U.S. bank in place of the foreign stock shares held in trust by that bank, thereby facilitating the trading of foreign shares in U.S. markets. The cross-listed equity, in the amount of \$450.4 million, represents securities domiciled in foreign countries, but are listed and traded on U.S. exchanges. Other foreign securities and investments consist of debt securities and alternative investment opportunities.

The Retirement Annuity Trust's policy regarding foreign equity is that not more than 30% of the assets at fair value shall be invested in the stocks of companies domiciled outside of the United States. Any amounts so invested shall be included in the 65% limitation for total stocks under 102 KAR 1:175 Section 2(e).

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

The following tables represent in U.S. dollars the fair values of investments that are subject to foreign currency risk as a result of cash contributions to each portfolio manager as of June 30, 2024, and 2023.

Retirement Annuity Trust

	2024	2023
Commingled Funds	\$ 3,365,967,147	\$ 3,419,653,286
Alternative Funds	308,205,040	288,041,664
American Depository Receipts	1,118,427,704	898,528,480
Cross-listed Equities	450,407,373	416,869,084
Bonds	64,977,943	69,579,525
Additional Categories (Fixed Income)	154,919,461	130,166,338
Additional Categories (Opportunistic)	51,102,553	59,967,536
Total	<u>\$ 5,514,007,221</u>	<u>\$ 5,282,805,913</u>

Health Insurance Trust

	2024	2023
Commingled Funds	\$ 637,418,413	\$ 176,735,816
Alternative Funds	48,220,555	44,970,500
American Depository Receipts	4,254,698	3,064,662
Cross-listed Equities	24,848,927	24,522,404
Bonds	944,770	929,210
Additional Categories (Fixed Income)	54,654,178	38,968,074
Additional Categories (Opportunistic)	7,827,731	8,970,760
Total	<u>\$ 778,169,272</u>	<u>\$ 298,161,426</u>

Life Insurance Trust

	2024	2023
Commingled Funds	\$ 20,276,780	\$ 18,632,074
Alternative Funds	627,174	585,914
American Depository Receipts	116,733	82,283
Cross-listed Equities	111,757	445,716
Total	<u>\$ 21,132,444</u>	<u>\$ 19,745,987</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

TRS's investments subject to foreign currencies and categorized in the preceding tables and are illustrated further in the following tables by each country and its currency. As previously stated, TRS holdings do not include foreign currency. The amounts shown are the fair value in U.S. dollars of TRS's foreign investments. These foreign investments are made with U.S. dollars in the custody of American financial institutions. Foreign holdings not readily identifiable to a specific country are listed in the various categories, which include investment receivables, payables, and new issues.

Retirement Annuity Trust

Currency	2024	2023	Currency	2024	2023
Argentine Peso	\$ 482,415	\$ 3,745,139	Korean Won	\$ 151,693,045	\$ 121,139,877
Australian Dollar	155,368,857	122,545,872	Kuwaiti Dinar	1,462,422	1,393,325
Bermudian Dollar	25,961,156	25,646,337	Liberian Dollar	31,829,384	8,606,275
Brazilian Real	101,395,067	189,427,302	Malaysian Ringgit	6,455,304	5,925,745
British Pound Sterling	604,600,630	562,799,745	Mexican Peso	68,703,220	86,960,085
Canadian Dollar	240,938,926	228,265,564	Netherlands Antillean Guilder	27,281,505	58,692,934
Cayman Islands Dollar	76,854,720	55,516,980	New Zealand Dollar	402,4384	4,060,842
Chilean Peso	24,216,855	34,532,810	Norwegian Krone	109,466,239	117,059,225
Chinese Yuan	215,253,817	230,226,800	Panamanian Balboa	5,894,653	6,842,893
Columbian Peso	9,748,422	20,528,381	Philippine Peso	2,590,671	2,689,042
Czech Koruna	672,456	477,133	Polish Zloty	5,714,039	3,165,484
Danish Krone	131,693,808	117,977,259	Qatari Riyal	1,463,337	1,446,234
Egyptian Pound	139,755	165,073	Russian Ruble	245	301
Euro	1,852,135,395	1,799,896,439	Saudi Riyal	741,4470	6,752,614
Gibraltar Pound	1,342,614	1,783,106	Singapore Dollar	39,096,792	43,230,003
Guernsey Pound	19,252,534	21,534,472	South African Rand	69,523,039	87,862,340
Hong Kong Dollar	96,757,397	133,387,146	Swedish Krona	106,240,870	87,214,257
Hungarian Forint	424,218	335,122	Swiss Franc	225,896,843	209,313,511
Indian Rupee	123,301,558	90,559,191	Taiwan New Dollar	177,090,398	77,929,562
Indonesian Rupiah	17,250,453	16,123,347	Thai Baht	8,263,183	8,920,904
Israeli New Shekel	6,522,067	18,900,297	Turkish Lira	2,328,865	1,254,165
Japanese Yen	722,241,984	632,034,559	United Arab Emirates Dirham	2,101,499	2,026,440
Jersey Pound	31,129,518	27,582,047	Various	1,788,192	6,329,734
			Total	\$ 5,514,007,221	\$ 5,282,805,913

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Health Insurance Trust					
Currency	2024	2023	Currency	2024	2023
Argentine Peso	\$ 299,059	\$ 75,338	Kuwaiti Dinar	\$ 1,453,518	\$ 436,334
Australian Dollar	33,056,321	8,650,271	Liberian Dollar	2,189,304	2,576,523
Bermudian Dollar	4,622,085	2,692,231	Malaysian Ringgit	2,932,188	740,806
Brazilian Real	7,967,916	2,722,645	Mexican Peso	5,477,441	2,741,437
British Pound Sterling	67,239,555	23,024,709	Netherlands Antillean Guilder	1,270,746	1,322,998
Canadian Dollar	64,245,186	27,939,627	New Zealand Dollar	1,057,174	353,234
Cayman Islands Dollar	11,749,194	7,697,318	Norwegian Krone	3,478,306	977,089
Chilean Peso	744,251	226,521	Panamanian Balboa	1,484,717	1,671,845
Chinese Yuan	15,002,759	8,695,471	Philippine Peso	1,172,382	416,479
Columbian Peso	303,258	121,878	Polish Zloty	2,588,560	917,195
Czech Koruna	228,148	74,195	Qatari Riyal	1,465,128	438,340
Danish Krone	15,157,700	3,608,514	Russian Ruble	281	70
Egyptian Pound	186,323	58,267	Saudi Riyal	7,370,778	2,084,647
Euro	204,389,530	108,859,158	Singapore Dollar	5,497,961	1,634,530
Gibraltar Pound	547,989	423,381	South African Rand	5,262,270	2,107,217
Hong Kong Dollar	37,825,597	12,158,439	Swedish Krona	14,840,880	4,335,880
Hungarian Forint	440,219	106,767	Swiss Franc	39,921,862	12,378,667
Indian Rupee	40,646,801	8,243,704	Taiwan New Dollar	38,552,825	8,209,243
Indonesian Rupiah	2,912,315	1,020,251	Thai Baht	2,885,641	1,042,844
Israeli New Shekel	2,746,203	815,845	Turkish Lira	2,318,242	508,578
Japanese Yen	99,787,132	27,576,850	United Arab Emirates Dirham	2,091,747	629,333
Jersey Pound	1,508,479	1,460,840	Various	(4,715)	-
Korean Won	23,256,016	6,385,917	Total	<u>778,169,272 \$</u>	<u>\$ 298,161,426</u>

Life Insurance Trust

Currency	2024	2023	Currency	2024	2023
Australian Dollar	\$ 1,014,870	\$ 787,747.00	Kuwaiti Dinar	\$ 41,503	\$ 39,542
Brazilian Real	225,409	433,796	Malaysian Ringgit	84,183	67,915
British Pound Sterling	1,787,976	1,724,878	Mexican Peso	152,985	165,540
Canadian Dollar	1,488,111	1,644,239	Netherlands Antillean Guilder	30,452	30,883
Cayman Islands Dollar	7,992	9,252	Norwegian Krone	107,282	117,759
Chilean Peso	20,457	20,624	Philippine Peso	29,673	32,063
Chinese Yuan	350,525	453,645	Polish Zloty	55,592	40,834
Columbian Peso	8,747	11,287	Qatari Riyal	41,529	41,044
Czech Koruna	6,737	6,557	Russian Ruble	7	6
Danish Krone	578,418	461,227	Saudi Riyal	210,419	191,636
Egyptian Pound	3,966	4,685	Singapore Dollar	154,273	169,951
Euro	5,335,587	5,202,798	South African Rand	151,419	189,940
Hong Kong Dollar	1,195,125	1,213,576	Swedish Krona	540,291	471,165
Hungarian Forint	12,039	9,511	Swiss Franc	1,009,452	863,941
Indian Rupee	1,186,833	770,001	Taiwan New Dollar	1,254,114	832,148
Indonesian Rupiah	83,549	93,222	Thai Baht	82,758	95,825
Israeli New Shekel	87,331	97,685	Turkish Lira	55,121	30,625
Japanese Yen	3,011,274	2,703,254	United Arab Emirates Dirham	59,640	57,510
Jersey Pound	-	48,555	Various	-	1
Korean Won	666,805	611,120	Total	<u>\$ 21,132,444</u>	<u>\$ 19,745,987</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

I. FAIR VALUE MEASUREMENT

A retiree pension defined benefit plan holds significant amounts of investments that are measured at fair value on a recurring basis. TRS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles (GAAP) in the United States of America. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and is not necessarily indicative of risk.

Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for an asset or liability. Level 2 inputs may include quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets of liabilities in non-active markets; and inputs other than quoted prices that are observable for the assets or liabilities, either directly or indirectly. Level 3 inputs are unobservable inputs for an asset or liability such as property appraisals, third-party valuations, and public market comparables of similar assets where applicable. Investments measured at fair value using the net asset value (NAV) per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy. The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs.

J. SCHEDULES OF FAIR VALUE

These category descriptions that immediately follow refer to the investments shown in the fair value level hierarchy schedules shown after these descriptions.

Cash and Cash Equivalents: Cash equivalents are short-term, highly liquid investments that readily are convertible to known amounts of cash and so near to their maturity that they present insignificant risk of changes in value because of changes in interest rates. This category is comprised of short-term investments via the Dreyfus Institutional Cash Advantage Fund and cash. Cash equivalents can be valued with inputs from quoted prices (unadjusted) for identical assets or liabilities in active markets that a government can access at the measurement date and, therefore, are classified as Level 1 assets.

Equity and Fixed Income Securities: Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets issued by pricing vendors for these securities. Debt and equity securities classified in Level 2 of the fair value hierarchy may use inputs such as market quotations, yields, maturities, call features, and ratings, or may be valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Debt securities classified in Level 3 are securities whose stated market price is unobservable by the marketplace and, instead, are priced by the issuers or industry groups for these securities.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Real Estate: Real estate falls into the Level 3 classification of the fair value hierarchy. Much of TRS's real estate consists of owned properties leased to various commercial enterprises. The fair value measurement for real estate is determined by professional appraisals every five years.

Additional Categories: Investments in this category do not fit the regular parameters for the Retirement Annuity Trust in 102 KAR 1:175. They fall into the allowable 15% of assets invested in any additional categories approved by the board. Corporate bonds falling within the Level 1 classification are valued using prices quoted in active markets issued by pricing vendors for these securities. Corporate bonds listed in Level 2 may use inputs such as market quotations, yields, maturities, call features, and ratings or may be valued using a matrix pricing technique that values securities based on their relationship to benchmark quoted prices. Corporate loans at Level 3 are valued by third-party pricing vendors such as Markit or Reuters.

Timberland: Timberland investments are managed investments regarding the acquiring, growing, and disposing of timber on timberland owned by TRS. The adviser contracts with outside appraisers to generate annual fair value estimates. The outside appraisers utilized the cost, sales comparison, and income capitalization approaches to estimate the fair value of the timber and timberland. The adviser challenges the reasonableness of the assumptions used and reviews the methodology to ensure the estimated fair value complies with GAAP. These funds are not available for redemption; instead, distributions are made to TRS as the underlying assets are sold.

Commingled Funds: These funds hold European loans, international equity, and domestic equity. Commingled funds are valued at the net asset value held at the end of the period based upon the fair value of the underlying investments.

Private Equity: Private equity funds invest in equity and debt securities issued by private and publicly held companies in connection with leveraged buyouts, recapitalizations, and expansion opportunities. Three of these funds are redeemable, but the majority do not allow redemptions. Alternatively, TRS receives distributions as the underlying assets of the funds liquidate, usually over a five- to 10-year liquidation period. Exchange quotations are not available readily for these investments. The fair value for most of these funds is determined using the net asset value one quarter in arrears, plus current quarter cash flows.

Private Real Estate: Three private real estate investments are open-ended. The remaining investments are not redeemable; rather TRS receives distributions as the underlying assets liquidate, usually over a five- to 10-year liquidation period. Exchange quotations for these investments are not available readily. Most private real estate fair value is determined using the net assets valued one quarter in arrears, plus current quarter cash flows.

Private Opportunistic Credit: One private opportunistic credit fund is redeemable. The remainder are closed funds that issue distributions as the underlying assets of the fund liquidate, usually over a five- to 10-year liquidation period. The fair value for most of these funds is determined using the net assets valued one month in arrears, plus current period cash flows.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Retirement Annuity Trust
Schedule of Investments at Fair Value Level - 2024

	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash and Cash Equivalents	\$ 573,009,827	\$ -	\$ -	\$ 573,009,827
Fixed Income				
Agency Bonds	-	161,249,891	-	161,249,891
Asset-backed Securities	-	50,756,369	-	50,756,369
Collateralized Mortgage Obligations	-	81,159,339	-	81,159,339
Commercial Mortgage-backed Securities	-	25,435,379	-	25,435,379
Corporate Bonds	-	1,357,883,192	-	1,357,883,192
Mortgage-backed Securities	-	240,078,003	-	240,078,003
Municipal Bonds	-	251,982,003	-	251,982,003
U.S. Government	1,172,507,649	3,860,611	-	1,176,368,260
Subtotal	<u>1,172,507,649</u>	<u>2,172,404,787</u>	-	<u>3,344,912,436</u>
Equities				
International Equity	1,535,932,745	1,874,836,671	-	3,410,769,416
U.S. Equity	9,489,067,616	171,253	-	9,489,238,869
Subtotal	<u>11,025,000,361</u>	<u>1,875,007,924</u>	-	<u>12,900,008,285</u>
Real Estate	-	-	399,885,046	399,885,046
Additional Categories				
Corporate Bonds	140,410	807,029,943	491,767	807,662,120
Corporate Loans	-	182,008	302,605,916	302,787,924
U.S. Government	4,965,250	-	-	4,965,250
Timberland	-	3,387,298	491,969,998	495,357,296
Asset-backed Securities	-	2,116,571	-	2,116,571
Subtotal	<u>5,105,660</u>	<u>812,715,820</u>	<u>795,067,681</u>	<u>1,612,889,161</u>
Total Investments by Fair Value Level	<u>\$ 12,775,623,497</u>	<u>\$ 4,860,128,531</u>	<u>\$ 1,194,952,727</u>	<u>\$ 18,830,704,755</u>
Investments Measured at NAV				
Commingled European Loan Funds				\$ 90,990,000
Commingled International Equity Funds				1,953,578,385
Commingled Domestic Equity Funds				521,912,260
Private Equity Funds				2,079,165,274
Private Real Estate Funds				1,312,767,960
Private Opportunistic Credit Funds				984,215,116
Total Investments Measured at NAV				<u>6,942,628,995</u>
Total Investments at Fair Value				<u>\$ 25,773,333,750</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Retirement Annuity Trust
Schedule of Investments at Net Asset Value (NAV) - 2024

	June 30, 2024	Unfunded Commitments	Redemption Frequency	Redemption Notice
Commingled European Loan Fund	\$ 90,990,000	\$ -	Daily	30 days
Commingled International Equity Fund	1,953,578,385	-	Daily	1-30 days
Commingled Domestic Equity Fund	521,912,260	-	Daily	1-30 days
Private Equity Funds				
Open-ended Funds	509,115,271	128,749,913	Quarterly, annually	90 days
Closed-ended Funds	1,570,050,003	1,170,315,778	N/A	N/A
Private Real Estate Funds				
Open-ended Funds	806,737,838	-	Quarterly	45-90 days
Closed-ended Funds	506,030,122	515,082,415	N/A	N/A
Private Opportunistic Credit Funds				
Open-ended Funds	825,837,823	38,500,000	Semiannually	75 days
Closed-ended Funds	158,377,293	54,836,385	N/A	N/A
Total Investments Measured at NAV	<u>\$ 6,942,628,995</u>			

Regarding the open-ended private equity and open-ended private opportunistic credit, a few restrictions remain that would prevent redemption at this time. For open-ended private equity, one fund has recently committed an additional \$50 million that has a 3-year lock-up period expiring March 31, 2027. In open-ended private opportunistic credit, one fund has a NAV of \$74.8 million with a 3-year lock-up period expiring November 11, 2025, while another has a NAV of \$117.8 million with a 3-year lock-up period expiring July 17, 2026.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Retirement Annuity Trust
Schedule of Investments at Fair Value Level - 2023

	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash and Cash Equivalents	\$ 568,929,242	\$ -	\$ -	\$ 568,929,242
Fixed Income				
Asset-backed Securities	-	28,882,848	-	28,882,848
Agency Bonds	-	94,136,785	-	94,136,785
Commercial Mortgage-backed Securities	-	26,589,385	-	26,589,385
Collateralized Mortgage Obligations	-	21,467,875	-	21,467,875
Corporate Bonds	-	1,273,746,115	-	1,273,746,115
Mortgage-backed Securities	-	113,404,191	-	113,404,191
Municipal Bonds	-	274,771,116	-	274,771,116
U.S. Government	1,135,361,577	3,800,614	-	1,139,162,191
Subtotal	1,135,361,577	1,836,798,929	-	2,972,160,506
Equities				
International Equity	2,030,127,648	1,745,797,429	-	3,775,925,077
U.S. Equity	8,997,878,455	-	-	8,997,878,455
Subtotal	11,028,006,103	1,745,797,429	-	12,773,803,532
Real Estate	-	-	401,370,072	401,370,072
Additional Categories				
Corporate Bonds	876,478	751,416,325	-	752,292,803
Corporate Loans	-	174,867	258,999,362	259,174,229
Timberland	-	3,990	485,154,423	485,158,413
U.S. Government	7,901,520	-	-	7,901,520
Subtotal	8,777,998	751,595,182	744,153,785	1,504,526,965
Total Investments by Fair Value Level	\$ 12,741,074,920	\$ 4,334,191,540	\$ 1,145,523,857	\$ 18,220,790,317
Investments Measured at NAV				
Commingled European Loan Funds				\$ 91,250,000
Commingled International Equity Funds				1,085,695,297
Commingled Domestic Equity Funds				428,638,038
Private Equity Funds				1,915,329,613
Private Real Estate Funds				1,375,912,910
Private Opportunistic Loan Funds				62,818,692
Private Opportunistic Credit Funds				753,842,564
Total Investments Measured at NAV				5,713,487,114
Total Investments at Fair Value				\$ 23,934,277,431

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Health Insurance Trust
Schedule of Investments at Fair Value Level - 2024

	<u>Level 1 Inputs</u>	<u>Level 2 Inputs</u>	<u>Level 3 Inputs</u>	<u>Fair Value</u>
Cash and Cash Equivalents	\$ 190,546,793	\$ -	\$ -	\$ 190,546,793
Fixed Income				
Agency Bonds	-	37,978,380	-	37,978,380
Callateralized Mortgage Obligations	-	1,777,731	-	1,777,731
Corporate Bonds	-	116,740,818	-	116,740,818
Mortgage-backed Securities	-	3,046,296	-	3,046,296
Municipal Bonds	-	9,078,875	-	9,078,875
U.S. Government	78,506,530	-	-	78,506,530
Subtotal	<u>78,506,530</u>	<u>168,622,100</u>	<u>-</u>	<u>247,128,630</u>
Equities				
International Equity	25,335,302	647,727,981	-	673,063,283
U.S. Equity	<u>1,150,152,092</u>	<u>-</u>	<u>-</u>	<u>1,150,152,092</u>
Subtotal	<u>1,175,487,394</u>	<u>647,727,981</u>	<u>-</u>	<u>1,823,215,375</u>
Additional Categories				
Corporate Bonds	85,601	221,328,508	-	221,414,109
Corporate Loans	-	182,008	93,465,948	93,647,956
U.S. Equity	6,634,499	-	-	6,634,499
Asset-backed Securities	-	522,328	-	522,328
Subtotal	<u>6,720,100</u>	<u>222,032,844</u>	<u>93,465,948</u>	<u>322,218,892</u>
Total Investments by Fair Value Level	<u>\$ 1,451,260,817</u>	<u>\$ 1,038,382,925</u>	<u>\$ 93,465,948</u>	<u>\$ 2,583,109,690</u>
Investments Measured at NAV				
Private Equity Funds				\$ 246,078,333
Private Opportunistic Credit Funds				166,780,267
Private Real Estate Funds				156,478,824
Total Investments Measured at NAV				<u>569,337,424</u>
Total Investments at Fair Value				<u>\$ 3,152,447,114</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Health Insurance Trust
Schedule of Investments at Net Asset Value (NAV) - 2024

	June 30, 2024	Unfunded Commitments	Redemption Frequency	Redemption Notice
Private Real Estate Funds				
Open-ended Funds	\$ 89,585,554	\$ 25,000,000	Quarterly	45-90 days
Closed-ended Funds	66,893,270	89,652,033	N/A	N/A
Private Equity Funds				
Closed-ended Funds	246,078,333	184,110,343	N/A	N/A
Private Opportunistic Credit Funds				
Open-ended Funds	148,192,600	2,000,000	Semiannually	75 days
Closed-ended Funds	18,587,667	8,149,787	N/A	N/A
Total Investments Measured at NAV	<u>\$ 569,337,424</u>			

Regarding the open-ended private opportunistic credit, a few restrictions remain that would prevent redemption at this time. In open-ended private opportunistic credit, one fund has a NAV of \$19.2 million with a 3-year lock-up period expiring November 11, 2025 while another has a NAV of \$18.1 million with a 3-year lock-up period expiring July 17, 2026.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Health Insurance Trust
Schedule of Investments at Fair Value Level - 2023

	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash and Cash Equivalents	\$ 77,221,128	\$ -	\$ -	\$ 77,221,128
Fixed Income				
Agency Bonds	-	2,989,020	-	2,989,020.00
Collateralized Mortgage Obligations	-	824,263	-	824,263.00
Corporate Bonds	-	93,762,993	-	93,762,993
Mortgage-backed Securities	-	3,051,772	-	3,051,772
Municipal Bonds	-	9,109,099	-	9,109,099
U.S. Government	43,405,938	-	-	43,405,938
Subtotal	43,405,938	109,737,147	-	153,143,085
Equities				
International Equity	24,887,225	461,717,466	-	486,604,691
U.S. Equity	919,910,248	-	-	919,910,248
Subtotal	944,797,473	461,717,466	-	1,406,514,939
Additional Categories				
Corporate Bonds	161,913	191,335,650	-	191,497,563
Corporate Loans	-	174,867	63,394,342	63,569,209
U.S. Equity	6,457,974	-	-	6,457,974
Subtotal	6,619,887	191,510,517	63,394,342	261,524,746
Total Investments by Fair Value Level	\$ 1,072,044,426	\$ 762,965,130	\$ 63,394,342	\$ 1,898,403,898
Investments Measured at NAV				
Private Equity Funds				\$ 220,197,307
Private Opportunistic Loan Funds				15,704,673
Private Opportunistic Credit Funds				119,854,518
Private Real Estate Funds				159,444,210
Total Investments Measured at NAV				515,200,708
Total Investments at Fair Value				\$ 2,413,604,606

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Life Insurance Trust
Schedule of Investments at Fair Value Level - 2024

	Level 1 Inputs	Level 2 Inputs	Level 3 Inputs	Fair Value
Cash and Cash Equivalents	\$ 4,919,258	\$ -	\$ -	\$ 4,919,258
Fixed Income				
Corporate Bonds	-	6,353,105	-	6,353,105
Mortgage-backed Securities	-	182,162	-	182,162
Municipal Bonds	-	2,274,478	-	2,274,478
U.S. Government	7,949,101	-	-	7,949,101
Subtotal	<u>7,949,101</u>	<u>8,809,745</u>	<u>-</u>	<u>16,758,846</u>
Equities				
International Equity	111,756	21,291,694	-	21,403,450
U.S. Equity	41,377,043	-	-	41,377,043
Subtotal	<u>41,488,799</u>	<u>21,291,694</u>	<u>-</u>	<u>62,780,493</u>
Additional Categories				
U.S. Equity	710,803	-	-	710,803
Subtotal	<u>710,803</u>	<u>-</u>	<u>-</u>	<u>710,803</u>
Total Investments by Fair Value Level	\$ 55,067,961	\$ 30,101,439	\$ -	\$ 85,169,400
Investments Measured at NAV				
Private Equity Funds				\$ 6,429,611
Private Real Estate Funds				7,037,595
Private Opportunistic Credit Funds				2,338,090
Total Investments Measured at NAV				<u>15,805,296</u>
Total Investments at Fair Value				<u>\$ 100,974,696</u>

Life Insurance Trust
Schedule of Investments at Net Asset Value (NAV) - 2024

	June 30, 2024	Unfunded Commitments	Redemption Frequency	Redemption Notice
Private Equity Funds				
Closed-ended Funds	\$ 6,429,611	\$ -	N/A	N/A
Private Real Estate Funds				
Closed-ended Funds	2,599,750	3,385,882	N/A	N/A
Open-ended Funds	4,437,845	-	Quarterly	45 days
Private Opportunistic Credit Funds				
Open-ended Funds	2,338,090	178,500	Semiannually	75 days
Total Investments Measured at NAV	<u>\$ 15,805,296</u>			

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Life Insurance Trust
Schedule of Investments at Fair Value Level - 2023

	<u>Level 1 Inputs</u>	<u>Level 2 Inputs</u>	<u>Level 3 Inputs</u>	<u>Fair Value</u>
Cash and Cash Equivalents	\$ 5,069,152	\$ -	\$ -	\$ 5,069,152
Fixed Income				
Corporate Bonds	-	6,810,627	-	6,810,627
Mortgage-backed Securities	-	199,079	-	199,079
Municipal Bonds	-	2,340,986	-	2,340,986
U.S. Government	8,591,791	-	-	8,591,791
Subtotal	<u>8,591,791</u>	<u>9,350,692</u>	<u>-</u>	<u>17,942,483</u>
Equities				
International Equity	445,716	19,221,343	-	19,667,059
U.S. Equity	36,515,893	-	-	36,515,893
Subtotal	<u>36,961,609</u>	<u>19,221,343</u>	<u>-</u>	<u>56,182,952</u>
Additional Categories				
U.S. Equity	692,720	-	-	692,720
Subtotal	<u>692,720</u>	<u>-</u>	<u>-</u>	<u>692,720</u>
Total Investments by Fair Value Level	<u>\$ 51,315,272</u>	<u>\$ 28,572,035</u>	<u>\$ -</u>	<u>\$ 79,887,307</u>
Investments Measured at NAV				
Private Equity Funds				\$ 4,921,166
Private Real Estate Funds				6,513,395
Private Opportunistic Credit Funds				2,102,984
Total Investments Measured at NAV				<u>13,537,545</u>
Total Investments at Fair Value				<u>\$ 93,424,852</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

K. Securities Lending

KRS 161.430 empowers the board with fiduciary responsibility for TRS funds. The system operates a securities lending program in which it temporarily lends securities to qualified agents in exchange for a net fee and high-quality collateral. The types of securities lent are U.S. government and agency securities; selected domestic bonds; and domestic and international stocks. TRS's custodian, BNYM, acts as a lending agent in exchanging securities for collateral. The collateral has a value of not less than 102% of the fair value of the lent securities, plus any accrued, unpaid distributions. The collateral may consist of both cash and non-cash collateral. The non-cash collateral may include, but not be limited to, debt obligations and securities, equity securities, corporate bonds, and convertible securities.

Securities lending transactions are accounted for in accordance with GASB Statement No. 28. During the year ended June 30, 2024, only the Retirement Annuity Trust fund and the Life Insurance Trust fund had securities lending transactions. The following schedules detail the net income earned in the Retirement Annuity Trust fund and the Life Insurance Trust fund from securities lending for the fiscal years ended June 30, 2024, and 2023.

Securities Lending Net Earnings

Item	Retirement Annuity Trust*		Life Insurance Trust	
	2024	2023	2024	2023
Gross Earnings (Interest and Fees)	\$ 38,306,599	\$ 30,166,303	\$ 682,519	\$ 828,198
Gross Borrower Rebates	(34,639,396)	(26,607,262)	(626,014)	(756,056)
Bank Fees	(1,100,027)	(1,067,559)	(16,947)	(21,638)
Net Earnings	<u>\$ 2,567,176</u>	<u>\$ 2,491,482</u>	<u>\$ 39,558</u>	<u>\$ 50,504</u>

**This schedule includes the Losey Scholarship fund.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Cash collateral is invested in guaranteed, short-term obligations of the U.S. government, select government agencies, and repurchase agreements with qualified agents. TRS cannot pledge or sell collateral securities received unless the borrower defaults. BNYM as the lending agent also indemnifies TRS from any financial loss associated with a borrower's default and collateral inadequacy. The Statement of Fiduciary Net Position does not report securities lending transactions collateralized by letters of credit or by securities that the governmental entity does not have the ability to pledge or sell unless the borrower defaults.

As of June 30, 2024, the average days to maturity for loans in the Retirement Annuity Trust was one day, and the weighted average investment maturity of cash collateral investments was one day. The trust had no credit risk exposure to borrowers because the amounts owed to borrowers exceeded the amounts the borrowers owed the trust, and no losses resulted during the period.

Security lending programs can entail interest rate risk and credit risk. TRS minimizes interest rate risk by limiting the term of cash collateral investments to several days.

The credit risk is controlled by investing cash collateral in securities with qualities similar to the credit worthiness of lent securities.

The following table presents the fair value of the underlying securities and the value of the collateral pledged at June 30, 2024, and 2023.

Retirement Annuity Trust				
2024				
Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Value Received	Total Collateral Received
Fixed Income	\$ 238,118,376	\$ 147,228,923	\$ 96,391,867	\$ 243,620,790
Equity	872,881,961	757,297,947	135,505,302	892,803,249
Total	<u>\$ 1,111,000,337</u>	<u>\$ 904,526,870</u>	<u>\$ 231,897,169</u>	<u>\$ 1,136,424,039</u>

2023				
Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Value Received	Total Collateral Received
Fixed Income	\$ 156,962,966	\$ 20,520,408	\$ 139,676,351	\$ 160,196,759
Equity	774,911,630	573,245,216	217,578,251	790,823,467
Total	<u>\$ 931,874,596</u>	<u>\$ 593,765,624</u>	<u>\$ 357,254,602</u>	<u>\$ 951,020,226</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 5: DEPOSITS WITH FINANCIAL INSTITUTIONS AND INVESTMENTS (INCLUDING REPURCHASE AGREEMENTS) (Continued)

Life Insurance Trust 2024				
Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Value Received	Total Collateral Received
Fixed Income	\$ 1,419,531	\$ 1,174,960	\$ 277,253	\$ 1,452,213
Equity	4,108,816	4,127,573	51,087	4,178,660
Total	<u>\$ 5,528,347</u>	<u>\$ 5,302,533</u>	<u>\$ 328,340</u>	<u>\$ 5,630,873</u>

2023				
Type of Securities Lent	Fair Value	Cash Collateral Received	Non-Cash Collateral Value Received	Total Collateral Received
Fixed Income	\$ 1,760,859	\$ -	\$ 1,795,453	\$ 1,795,453
Equity	12,411,525	4,067,643	8,464,558	12,532,201
Total	<u>\$ 14,172,384</u>	<u>\$ 4,067,643</u>	<u>\$ 10,260,011</u>	<u>\$ 14,327,654</u>

L. ANNUAL MONEY-WEIGHTED RATE OF RETURN

A money-weighted rate of return is an expression of investment performance that is net of TRS's investment fees and expenses, adjusted for the changing amounts actually invested. The following table reflects the money-weighted rates of return.

Annual Rate of Return Net of Investment Fees and Expenses

	<u>2024</u>	<u>2023</u>
Retirement Annuity Trust	11.91%	10.24%
Health Insurance Trust	12.37%	11.52%
Life Insurance Trust	11.18%	9.63%

**TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS****June 30, 2024****(Continued)****NOTE 6: RETIREMENT PLANS FOR TRS EMPLOYEES**

Full-time employees of TRS participate in either TRS or Kentucky Employees Retirement System (KERS). Both plans are multiple-employer cost-sharing defined benefit retirement annuity and other postemployment benefits plans. All TRS employees in positions requiring a four-year degree are covered under TRS. The contribution rates and required employer matching are the same as state agency employers in TRS. These rates, the plan description, and the funding policy are disclosed fully in the notes to the financial statements.

The annual required contributions for TRS employee members in TRS for the fiscal years 2024 and 2023 were \$1.5 million and \$1.4 million, respectively. TRS contributed 100% of the required contribution each year.

All other TRS employees are covered under the KERS non-hazardous employees' plan. The plan provides for retirement, disability, and death benefits to plan members. Retirement benefits may be extended to beneficiaries of plan members under certain circumstances. Per KRS 61.565(2), contribution rates shall be determined by the Kentucky Retirement Systems board (KRS board) on the basis of an annual actuarial valuation. Rates may be amended by the KRS board as needed.

Members of KERS who joined prior to July 1, 2008, are required to contribute 5% of their annual creditable compensation, and members who joined on or after July 1, 2008, contribute 6%. As the employer, TRS is required to contribute the annual actuarially determined rate of the creditable compensation (or the rate approved by legislators). TRS is required to contribute 9.97% plus a monthly amount determined by the KERS actuary for TRS's portion of the total unfunded liability over a set period regardless of covered payroll. TRS's total contributions to KERS were \$919,143 and \$887,844 for fiscal 2024 and 2023. TRS contributed 100% of the required contributions for each year.

NOTE 7: DESCRIPTION OF OTHER FUNDS**A. 403(B) TAX-SHELTERED ANNUITY PLAN****Plan Description**

TRS has administered a salary deferral program as permitted by section 403(b) of the Internal Revenue Code. Under this program members voluntarily deferred a portion of their compensation within the limits established by the applicable laws and regulations. The board subsequently discontinued offering the program. Members who were not receiving annuities were able to transfer their accounts into other tax-sheltered plans. As of June 30, 2024, two members remained who are receiving annuities under the plan. Effective Jan. 1, 2022, the board restated the plan to allow TRS 4 members and employers to make voluntary contributions to the plan to comply with the requirements of the legislation that created TRS 4. As of June 30, 2024, 17 TRS 4 members participated in the voluntary plan, and the combined balance of those accounts was \$28,009, compared to nine members with a combined balance of \$9,725 at June 30, 2023.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 7: DESCRIPTION OF OTHER FUNDS (Continued)

Basis of Accounting

The Tax-Sheltered Annuity Plan financial statements are prepared using an accrual basis of accounting.

Method Used to Value Investments

The short-term investments are reported at cost, which approximates fair value.

B. SUPPLEMENTAL BENEFIT FUND

The Supplemental Benefit Fund is a qualified governmental excess benefit arrangement as described in Section 415 of the Internal Revenue Code. In accordance with KRS 161.611 and KRS 161.420(8), TRS is authorized to provide a supplemental retirement benefit fund for the sole purpose of enabling the employer to apply the same formula for determining benefits payable to all members of TRS employed by the employer, whose benefits under the system are limited by Section 415 of the Internal Revenue Code of 1986 as amended. Funding of benefits payable under this fund are provided by the employer and are segregated from funds that are maintained by TRS for payment of regular benefits.

C. JUNITA LOSEY SCHOLARSHIP FUND

Junita Losey, a retired teacher, designated TRS as a residuary beneficiary of her estate and expressed a desire that TRS establish a scholarship program for Kentucky students studying to be teachers. Ms. Losey died in 1997, and her estate provided a scholarship bequest to TRS. The scholarship bequest has at all times been segregated from funds that are maintained by TRS for payment of regular benefits. The board's Scholarship Committee meets each December to consider scholarship standards and administration of the bequest.

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) - HEALTH INSURANCE TRUST

A. PLAN DESCRIPTION

In addition to the retirement annuity plan described in Note 1, KRS 161.675 requires TRS to provide access to postemployment healthcare benefits for eligible members and dependents. The TRS Health Insurance Trust is funded by employer and member contributions. Changes made to the medical plans provided through the trust may be made by the TRS Board of Trustees, the Kentucky Department of Employee Insurance, and the General Assembly.

Medical coverage through TRS is funded by a combination of contributions from employees, the state, and other employers. Coverage is provided through an account established pursuant to 26 U.S.C. sec. 401(h) and a 115 trust fund that went into effect on July 1, 2010. The insurance trust fund includes employer and retired member contributions required under KRS 161.550 and KRS 161.675(4)(b).

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

To be eligible for medical benefits, the member must have retired either for service or disability and a required amount of service credit. The TRS medical plan offers members who are not eligible for Medicare and under age 65, coverage through the Kentucky Employees Health Plan (KEHP) administered by the Kentucky Department of Employee Insurance. Once retired members and eligible spouses attain age 65 and or are eligible for Medicare, coverage is obtained through the Medicare Eligible Health Plan (MEHP) administered by TRS.

Contributions are made on behalf of TRS retired members toward payment of health insurance premiums. The amount of the member's contribution is based on a table approved by the TRS board. Retired members pay premiums in excess of the monthly contribution. The amount of insurance premiums paid by retirees for fiscal years 2024 and 2023 were \$62.9 million and \$63.3 million, respectively. The Commonwealth of Kentucky bears risk for excess claims expenses that exceed the premium equivalents charged for the KEHP.

At June 30, 2024, TRS insurance covered 41,000 retirees and 6,322 dependents, and at June 30, 2023, TRS insurance covered 41,055 retirees and 6,555 dependents. The medical plan has 202 participating employers with 76,014 and 75,644 active members contributing at June 30, 2024, and 2023, respectively.

Retiree health care premiums and other income received reduce the amount of expenditures reported in the deductions section in the Statement of Changes in Fiduciary Net Position for the Health Insurance Trust. These expenditures are summarized in the following table.

	2024	2023
MEHP Group Expenditures	\$ 244,030,540	\$ 222,852,822
KEHP Group Expenditures	119,207,504	110,701,357
Subtotal	363,238,044	333,554,179
Less: Amounts Paid by Retirees	(62,939,581)	(63,329,256)
Less: Formulary Rebates	(71,191,590)	(63,433,922)
Less: Medicare Subsidies and Other Recovery Income	(85,584,941)	(81,924,996)
Net Insurance Expenditures	\$ 143,521,932	\$ 124,866,005

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

B. NET OPEB LIABILITY OF EMPLOYERS

The net OPEB liability [i.e., the system's liability determined in accordance with GASB Statement No. 74 less the fiduciary net position (FNP)] for the Health Insurance Trust as of June 30, 2024, and 2023 is shown in the following table.

Schedule of Net OPEB Liability of Employers
(In Thousands)

Fiscal Year Ending June 30	Total OPEB Liability (TOL)* A	Plan Fiduciary Net Position B	Employers Net OPEB Liability (NOL) (A-B)	Plan Fiduciary Net Position as a % of Total OPEB Liability (B/A)	Covered Payroll C	Net OPEB Liability as a % of Covered Payroll [(A-B)/C]
2024	\$ 5,546,693	\$ 3,317,711	\$ 2,228,982	59.8%	\$ 4,140,446	53.83%
2023	5,179,049	2,743,413	2,435,636	53.0%	3,977,280	61.24%

* *The TOL includes the additional consideration for the current treatment of KEHP implicit subsidies that may be needed in the future. This is an additional liability from Health Insurance Trust accrued liabilities.*

C. ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation follows.

Valuation date	June 30, 2023
Investment rate of return	7.1%, net of OPEB plan investment expense, including inflation
Projected salary increases	3.0 - 7.5%, including wage inflation
Inflation rate	2.5%
Real wage growth	0.25%
Wage inflation	2.75%
Municipal bond index rate	3.94%
Discount rate	7.1%
Single equivalent interest rate	7.1%, net of OPEB plan investment expense, including price inflation
Health care cost trends	
Medical trend	6.5% for fiscal year 2024, decreasing to an ultimate rate of 4.5% by fiscal year 2031
Medicare Part B premiums	5.92% for fiscal year 2024, with an ultimate rate of 4.5% by fiscal year 2035

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

Mortality rates were based on the Pub2010 (Teachers Benefit-Weighted) Mortality Table projected generationally with MP-2020 with various set-forwards, set-backs, and adjustments for each of the groups; service, retirees, contingent annuitants, disabled retirees, and active members. The demographic actuarial assumptions for retirement, disability incidence, withdrawal, rates of plan participation, and rates of plan election used in the June 30, 2023, valuation were based on the results of the most recent actuarial experience study for the system, which covered the five-year period ending June 30, 2020, adopted by the board on September 20, 2021. The remaining actuarial assumptions (e.g., initial per capita costs, health care cost trends) used in the June 30, 2023, valuation of the health trust were based on a review of recent plan experience done concurrently with the June 30, 2023, valuation. The health care cost trend rate assumption was updated for the June 30, 2023, valuation and was shown as an assumption change in the total OPEB liability (TOL) roll-forward while the change in initial per capita claims costs were included with experience in the TOL roll-forward. The Municipal Bond Index Rate used for this purpose is the June average of the Bond Buyer General Obligation 20-year Municipal Bond Index published weekly by the Board of Governors of the Federal Reserve System.

D. TARGET ALLOCATIONS

The long-term expected rate of return on OPEB investments was determined using a log-normal distribution analysis 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 allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table.

Asset Class	Target Allocation Percentage	Long-term Expected Real Rate Percentage of Return
U.S. Large Cap Equity	35.4%	5.0%
U.S. Small Cap Equity	2.6%	5.5%
Developed International Equity	15.0%	5.5%
Emerging Markets Equity	5.0%	6.1%
Fixed Income	9.0%	1.9%
High Yield Bonds	8.0%	3.8%
Other Additional Categories	9.0%	3.7%
Real Estate	6.5%	3.2%
Private Equity	8.5%	8.0%
Cash	1.0%	1.6%
Total	100.0%	

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

E. DISCOUNT RATE

The discount rate used to measure the TOL as of the measurement date was 7.1%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB Statement No. 74. The projection's basis was an actuarial valuation performed as of June 30, 2023. In addition to the actuarial methods and assumptions of the June 30, 2023, actuarial valuation, the following actuarial methods and assumptions were used in the projection of cash flows:

- Total payroll for the initial projection year consists of the payroll of the active membership present on the valuation date. In subsequent projection years, total payroll was assumed to increase annually at a rate of 2.75%.
- The KEHP group retiree health care costs for members who retired on or after July 1, 2010, were assumed to be paid by either the state or the retirees themselves.
- As administrative expenses, other than the administrative fee of \$8.00 per member per month (PMPM) paid to KEHP by TRS, were assumed to be paid in all years by the employer as they come due, they were not considered.
- Cash flows occur midyear.
- Future contributions to the Health Insurance Trust were based upon the contribution rates defined in statute and the projected payroll of active employees. Per KRS 161.540(1)(e) and 161.550(4), when the health trust achieves a sufficiently funded status, as determined by TRS's actuary, the following health trust statutory contributions are to be decreased, suspended, or eliminated:
 - Employee contributions
 - School district and university employer contributions
 - State contributions for KEHP premium subsidies payable to retirees who retire after June 30, 2010

To reflect these adjustments, open group projections were used and assumed an equal, pro rata reduction to the current statutory amounts in the years if the health trust is projected to achieve a funded ratio of 100% or more. Here, the current statutory amounts are adjusted to achieve total contributions equal to the actuarially determined contribution, as determined by the prior year's valuation and in accordance with the health trust's funding policy. As the specific methodology to be used for the adjustments has yet to be determined, there may be differences between the projected results and future experience. This also may include any changes to retiree contributions for KEHP coverage pursuant to KRS 161.675(4)(b).

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

- In developing the adjustments to the statutory contributions in future years, the following was assumed:
 - Liabilities and cash flows are net of expected retiree contributions and any implicit subsidies attributable to coverage while participating in KEHP.
 - For the purposes of developing estimates for new entrants, active headcounts were assumed to remain flat for all future years.

Based on these assumptions, the Health Insurance Trust's FNP was not projected to be depleted.

The FNP projections are based upon the health trust's financial status on the valuation date; the indicated set of methods and assumptions; and the requirements of GASB Statement No. 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing basis, reflecting the impact of future members. Therefore, the results of these tests do not necessarily indicate whether or not the health trust will actually run out of money, the financial condition of the trust, or the trust's ability to make benefit payments in future years.

These paragraphs require disclosure of the sensitivity of the NOL to changes in the health care cost trend rates and the discount rate for the Health Insurance Trust. The following exhibits present the NOL of the trust, calculated using the health care cost trend rates, as well as what the trust's NOL would be if it were calculated using a health care cost trend rate that is 1% lower or 1% higher than the current rate. Similarly, the exhibits present the NOL of the trust, calculated using the single equivalent interest rate (SEIR), as well as what the NOL would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current SEIR.

Schedule of Net OPEB Liability 2024
(In Thousands)

	1% Decrease (6.1%)	Current Discount Rate (7.1%)	1% Increase (8.1%)
Net OPEB Liability- Health Insurance Trust	\$ 2,961,188	\$ 2,228,982	\$ 1,622,126

Schedule of Health Care Cost Trend Rates 2024
(In Thousands)

	1% Decrease	Current Health Care Cost Rate	1% Increase
Net OPEB Liability- Health Insurance Trust	\$ 1,505,651	\$ 2,228,982	\$ 3,127,709

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

Schedule of Net OPEB Liability 2023
(In Thousands)

	1% Decrease (6.1%)	Current Discount Rate (7.1%)	1% Increase (8.1%)
Net OPEB Liability- Health Insurance Trust	\$ 3,132,761	\$ 2,435,636	\$ 1,859,473

Schedule of Health Care Cost Trend Rates 2023
(In Thousands)

	1% Decrease	Current Health Care Cost Rate	1% Increase
Net OPEB Liability- Health Insurance Trust	\$ 1,753,458	\$ 2,435,636	\$ 3,285,081

The TOL of the Health Insurance Trust for 2024 is based upon an actuarial valuation performed as of the valuation date, June 30, 2023. An expected TOL is determined as of June 30, 2024, using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2023, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the service cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the measurement date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the health trust, as of June 30, 2024, is shown in the following table.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

TOL Roll-Forward 2024
(In Thousands)

	<u>Expected</u>	<u>Actual</u>
(a) TOL as of June 30, 2023*	\$ 5,179,049	\$ 5,023,491
(b) Actual benefit payments and refunds for July 1, 2023-June 30, 2024	(143,522)	(143,522)
(c) Interest on TOL = [(a) x (0.071)] + [(b) x (0.0355)]	362,617	351,573
(d) Service cost for July 1, 2023-June 30, 2024 at the end of the year	130,757	130,757
(e) Changes of benefit terms	-	-
(f) Changes of assumptions**	184,394	184,394
(g) TOL rolled forward to June 30, 2024 = (a) + (b) + (c) + (d) + (e) + (f)	<u>5,713,295</u>	<u>5,546,693</u>
(h) Difference between expected and actual experience (gain) loss		<u>\$ (166,602)</u>

* The TOL used in the roll-forward as of June 30, 2023, is calculated using the discount rate as of the prior measurement date.

** The health care trend rates and morbidity factors were updated to reflect future anticipated experience.

The TOL of the Health Insurance Trust for 2023 is based upon an actuarial valuation performed as of the June 30, 2022, valuation date. An expected, TOL was determined as of June 30, 2023, using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2022, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the service cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the measurement date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the health trust, as of June 30, 2023, is shown in the following table.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

TOL Roll-Forward 2023
(In Thousands)

	Expected	Actual
(a) TOL as of June 30, 2022*	\$ 4,751,706	\$ 4,660,037
(b) Actual benefit payments and refunds for July 1, 2022-June 30, 2023	(124,866)	(124,866)
(c) Interest on TOL = [(a) x (0.071)] + [(b) x (0.0355)]	332,938	326,430
(d) Service cost for July 1, 2022-June 30, 2023 at the end of the year	120,458	120,458
(e) Changes of benefit terms	-	-
(f) Changes of assumptions**	196,990	196,990
(g) TOL rolled forward to June 30, 2023	5,277,226	5,179,049
= (a) + (b) + (c) + (d) + (e) + (f)		
(h) Difference between expected and actual experience (gain) loss		<u>\$ (98,177)</u>

* The TOL used in the roll-forward as of June 30, 2022, is calculated using the discount rate as of the prior measurement date.

** The health care trend rates, as well as the Tier 4 retirement decrements, were updated to reflect future anticipated experience.

NOTE 9: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – LIFE INSURANCE TRUST

A. PLAN DESCRIPTION

TRS administers the Life Insurance Trust as provided by KRS 161.655 to provide life insurance benefits to retired and active members. This benefit is financed by actuarially determined contributions from the 202 participating employers. The benefit is \$5,000 for members who are retired for service or disability and \$2,000 for active contributing members who began participating before Jan. 1, 2022. For TRS 4 members, the life insurance benefit payable upon the death of a member is \$5,000 for active contributing members and \$10,000 for retired or disabled members.

B. NET OPEB LIABILITY OF EMPLOYERS

The net OPEB liability (NOL) (i.e., the system's liability determined in accordance with GASB Statement No. 74 less the fiduciary net position) for the life insurance fund as of June 30, 2024, and 2023 follows.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 9: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – LIFE INSURANCE TRUST
(Continued)

Schedule of Net OPEB Liability of Employers
(In Thousands)

Fiscal Year Ending June 30	Total OPEB Liability (TOL) A	Plan Fiduciary Net Position B	Employers Net OPEB Liability (NOL) (A-B)	Plan Fiduciary Net Position as a % of Total OPEB Liability (B/A)	Covered Payroll C	Net OPEB Liability as a % of Covered Payroll [(A-B)/C]
2024	\$ 126,072	\$ 101,559	\$ 24,513	80.6%	\$ 4,140,446	0.59%
2023	122,254	94,030	28,224	76.9%	3,977,280	0.71%

C. ACTUARIAL ASSUMPTIONS

A summary of the actuarial assumptions as of the latest actuarial valuation is shown below.

Valuation Date	June 30, 2023
Investment Rate of Return	7.1%, net of OPEB plan investment expense, including inflation
Projected Salary Increases	3 - 7.5%, including wage inflation
Inflation Rate	2.5%
Real Wage Growth	0.25%
Wage Inflation	2.75%
Municipal Bond Index Rate	3.94%
Discount Rate	7.1%
Single Equivalent Interest Rate	7.1%, net of OPEB plan investment expense, including price inflation

Mortality rates were based on the Pub2010 (Teachers Benefit-Weighted) Mortality Table projected generationally with MP-2020 with various set-forwards set-backs and adjustments for each of the groups: service, retirees, contingent annuitants, disabled retirees, and active members. The demographic actuarial assumptions for retirement, disability incidence, withdrawal, rates of plan participation, and rates of plan election used in June 30, 2023, valuation were based on the results of the most recent actuarial experience study for the system, which covered the five-year period ending June 30, 2020, adopted by the board on September 20, 2021. The Municipal Bond Index Rate used for this purpose is the June average of the Bond Buyer General Obligation 20-year Municipal Bond Index published weekly by the Board of Governors of the Federal Reserve System.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

D. TARGET ALLOCATIONS

The long-term expected rate of return on OPEB investments was determined using a log-normal distribution analysis 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 allocation and best estimates of arithmetic real rates of return for each major asset class, as provided by TRS's investment consultant, are summarized in the following table.

<u>Asset Class</u>	<u>Target Allocation Percentage</u>	<u>Long-term Expected Real Rate Percentage of Return</u>
U.S. Equity	40.0%	5.2%
International Equity	15.0%	5.5%
Emerging Markets Equity	5.0%	6.1%
Fixed Income	21.0%	1.9%
Real Estate	7.0%	3.2%
Private Equity	5.0%	8.0%
Additional Categories	5.0%	4.0%
Cash	2.0%	1.6%
Total	100.0%	

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 8: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – HEALTH INSURANCE TRUST
(Continued)

E. DISCOUNT RATE

The discount rate used to measure the total OPEB liability (TOL) as of the measurement date was 7.1%. The projection of cash flows used to determine the discount rate was performed in accordance with GASB Statement No. 74. The projection's basis was an actuarial valuation performed as of June 30, 2023. In addition to the actuarial methods and assumptions of the June 30, 2023, actuarial valuation, the following actuarial methods and assumptions were used in the projection of the life insurance cash flows:

- Total payroll for the initial projection year consists of the payroll of the active membership present on the valuation date. In subsequent projection years, total payroll was assumed to increase annually at a rate of 2.75%.
- The employer will contribute the actuarially determined contribution (ADC) in accordance with the Life Insurance Trust's funding policy (Schedule E) determined by a valuation performed on a date two years prior to the beginning of the fiscal year in which the ADC applies.
- As administrative expenses were assumed to be paid in all years by the employer as they came due, they were not considered.
- Active employees do not contribute to the plan.
- Cash flows occur midyear.

Based on these assumptions, the Life Insurance Trust's fiduciary net position (FNP) was not projected to be depleted.

The FNP projections are based upon the Life Insurance Trust's financial status on the valuation date; the indicated set of methods and assumptions; and the requirements of GASB Statement No. 74. As such, the FNP projections are not reflective of the cash flows and asset accumulations that would occur on an ongoing basis, reflecting the impact of future members. Therefore, the results of these tests do not necessarily indicate whether the Life Insurance Trust actually will run out of money, the financial condition of the trust, or the trust's ability to make benefit payments in future years.

These paragraphs require disclosure of the sensitivity of the NOL to changes in the discount rate for the Life Insurance Trust. The schedules below present the NOL of the trust calculated using the SEIR, as well as what the trust's NOL would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current SEIR.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 9: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – LIFE INSURANCE TRUST
(Continued)

Schedule of Net OPEB Liability 2024
(In Thousands)

	1% Decrease (6.1%)	Current Discount Rate (7.1%)	1% Increase (8.1%)
Systems' Net OPEB Liability- Life Insurance Trust	\$ 42,041	\$ 24,513	\$ 10,327

Schedule of Net OPEB Liability 2023
(In Thousands)

	1% Decrease (6.1%)	Current Discount Rate (7.1%)	1% Increase (8.1%)
Systems' Net OPEB Liability- Life Insurance Trust	\$ 45,402	\$ 28,224	\$ 14,326

The TOL of the Life Insurance Trust for 2024 is based upon an actuarial valuation performed as of the valuation date, June 30, 2023. An expected TOL is determined as of June 30, 2024, using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2023, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the service cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the measurement date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the Life Insurance Trust, as of June 30, 2024, is shown in the following table.

TOL Roll-Forward 2024
(In Thousands)

	Expected	Actual
(a) TOL as of June 30, 2023*	\$ 122,254	\$ 122,611
(b) Actual benefit payments and refunds for July 1, 2023-June 30, 2024	(6,106)	(6,106)
(c) Interest on TOL = [(a) x (0.071)] + [(b) x (0.0355)]	8,463	8,489
(d) Service cost for July 1, 2023-June 30, 2024	1,078	1,078
(e) Changes of benefit terms	-	-
(f) Changes of assumptions	-	-
(g) TOL rolled forward to June 30, 2024 = (a) + (b) + (c) + (d) + (e) + (f)	\$ 125,689	\$ 126,072
(h) Difference between expected and actual experience (gain) loss		\$ 383

**The TOL used in the roll-forward as of June 30, 2023 is calculated using the discount rate as of the prior measurement date.*

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
NOTES TO FINANCIAL STATEMENTS
June 30, 2024
(Continued)

NOTE 9: OTHER POSTEMPLOYMENT BENEFITS (OPEB) – LIFE INSURANCE TRUST
(Continued)

The TOL of the Life Insurance Trust for 2023 is based upon an actuarial valuation performed as of the June 30, 2022, valuation date. An expected TOL is determined as of June 30, 2023, using standard roll-forward techniques. The roll-forward calculation begins with the TOL, as of June 30, 2022, subtracts the actual benefit payments (net of retiree contributions, if applicable) for the year, applies interest at the discount rate for the year, and then adds the annual normal cost (also called the service cost). If applicable, actuarial gains and losses arising from the difference between estimates and actual experience (excluding amounts related to benefit changes and changes in assumptions or other inputs) are reconciled to the TOL as of the measurement date. Last, any changes of assumptions or other inputs are reflected. The procedure used to determine the TOL of the trust, as of June 30, 2023, is shown in the following table.

TOL Roll-Forward 2023
(In Thousands)

	Expected	Actual
(a) TOL as of June 30, 2022*	\$ 119,484	\$ 119,197
(b) Actual benefit payments and refunds for July 1, 2022-June 30, 2023	(6,219)	(6,219)
(c) Interest on TOL = [(a) x (0.071)] + [(b) x (0.0355)]	8,263	8,242
(d) Service cost for July 1, 2022-June 30, 2023	1,035	1,035
(e) Changes of benefit terms	-	-
(f) Changes of assumptions**	(1)	(1)
(g) TOL rolled forward to June 30, 2023 = (a) + (b) + (c) + (d) + (e) + (f)	122,562	122,254
(h) Difference between expected and actual experience (gain) loss		\$ (308)

* The TOL used in the roll-forward as of June 30, 2022, is calculated using the discount rate as of the prior measurement date.

**Tier 4 retirement decrements were updated to reflect future anticipated experience.

REQUIRED SUPPLEMENTARY INFORMATION

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024

Schedule of Changes in Net Pension Liability
Retirement Annuity Trust
(In Thousands)

	2024	2023	2022	2021	2020
Total Pension Liability					
Service Cost	\$ 665,383	\$ 654,676	\$ 621,689	\$ 563,188	\$ 552,625
Interest	2,895,379	2,796,631	2,724,644	2,581,630	2,517,671
Difference Between Expected and Actual Experience	160,600	398,576	42,986	32,475	10,661
Changes of Assumptions	-	-	-	3,072,848	-
Benefit Payments	(2,466,971)	(2,391,326)	(2,305,853)	(2,235,241)	(2,167,239)
Refunds of Contributions	(32,922)	(26,910)	(26,745)	(25,374)	(28,472)
Net Change in Total Pension Liability	1,221,469	1,431,647	1,056,721	3,989,526	885,246
Total Pension Liability - Beginning	42,029,935	40,598,288	39,541,567	35,552,041	34,666,795
Total Pension Liability - Ending (a)	43,251,404	42,029,935	40,598,288	39,541,567	35,552,041
Plan Net Position					
Contributions - State	1,085,042	1,042,434	1,570,118	1,060,257	1,048,193
Contributions - Other Employers	93,640	102,015	109,467	86,720	86,088
Contributions - Members	385,907	366,775	356,967	327,833	324,664
Net Investment Income	2,813,693	2,266,085	(2,727,776)	6,017,186	1,094,023
Benefit Payments	(2,466,971)	(2,391,326)	(2,305,853)	(2,235,241)	(2,167,239)
Administrative Expense	(14,807)	(14,471)	(12,005)	(12,602)	(12,167)
Refunds of Contributions	(32,922)	(26,910)	(26,745)	(25,374)	(28,472)
Net Change in Plan Net Position	1,863,528	1,344,602	(3,035,827)	5,218,779	345,090
Plan Net Position - Beginning	24,244,554	22,899,952	25,935,779	20,717,000	20,371,910
Plan Net Position - Ending (b)	26,108,136	24,244,554	22,899,952	25,935,779	20,717,000
Net Pension Liability - Ending (a)-(b)	\$ 17,143,268	\$ 17,785,381	\$ 17,698,336	\$ 13,605,788	\$ 14,835,041

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

Schedule of Changes in Net Pension Liability
Retirement Annuity Trust
(In Thousands)

	2019	2018	2017	2016	2015
Total Pension Liability					
Service Cost	\$ 542,970	\$ 1,104,102	\$ 1,332,587	\$ 1,120,893	\$ 1,015,080
Interest	2,448,387	2,063,109	1,964,107	2,027,457	2,029,372
Difference Between Expected and Actual Experience	93,650	(222,473)	199,471	(58,035)	-
Changes of Assumptions	-	(14,167,315)	(2,321,327)	4,030,834	1,511,960
Benefit Payments	(2,094,364)	(2,004,617)	(1,918,612)	(1,833,199)	(1,741,456)
Refunds of Contributions	(32,403)	(31,073)	(26,305)	(27,748)	(23,033)
Net Change in Total Pension Liability	958,240	(13,258,267)	(770,079)	5,260,202	2,791,923
Total Pension Liability - Beginning	33,708,555	46,966,822	47,736,901	42,476,699	39,684,776
Total Pension Liability - Ending (a)	34,666,795	33,708,555	46,966,822	47,736,901	42,476,699
Plan Net Position					
Contributions - State	1,051,452	969,698	981,417	484,987	480,073
Contributions - Other Employers	71,583	78,973	79,303	80,468	79,506
Contributions - Members	321,172	319,127	313,625	313,044	308,160
Net Investment Income	1,085,189	1,953,214	2,475,753	(245,215)	862,179
Benefit Payments	(2,094,364)	(2,004,617)	(1,918,612)	(1,833,199)	(1,741,456)
Administrative Expense	(12,352)	(11,388)	(10,314)	(8,636)	(8,869)
Refunds of Contributions	(32,403)	(31,073)	(26,305)	(27,748)	(23,033)
Net Change in Plan Net Position	390,277	1,273,934	1,894,867	(1,236,299)	(43,440)
Plan Net Position - Beginning	19,981,633	18,707,699	16,812,832	18,049,131	18,092,571
Plan Net Position - Ending (b)	20,371,910	19,981,633	18,707,699	16,812,832	18,049,131
Net Pension Liability - Ending (a)-(b)	\$ 14,294,885	\$ 13,726,922	\$ 28,259,123	\$ 30,924,069	\$ 24,427,568

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

NOTE 1: NET PENSION LIABILITY

The total pension liability contained in the following schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting. The net pension liability is measured as the total pension liability less the amount of the fiduciary net position of the system.

Changes of Benefit Terms. The TRS 4 benefit tier was added for members joining the system on and after Jan. 1, 2022.

Changes of Assumptions. In the 2020 experience study, rates of withdrawal, retirement, disability, mortality, and salary increase were adjusted to more closely reflect actual experience. The expectation of mortality was changed to the Pub2010 Mortality Tables (Teachers Benefit-Weighted) projected generationally with MP-2020 with various set forwards, set-backs, and adjustments for each of the groups: service retirees, contingent annuitants, disabled retirees, and actives. The assumed long-term investment rate of return was changed from 7.5% to 7.1% and the price inflation assumption was lowered from 3% to 2.5%.

In the 2016 valuation, rates of withdrawal, retirement, disability, mortality, and salary increase were adjusted to more closely reflect actual experience. In the 2016 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2025 with projection scale BB, set forward two years for males and one year for females rather than the RP-2000 Mortality Tables projected to 2020 with projection scale AA, which was used prior to 2016.

In the 2011 valuation, rates of withdrawal, retirement, disability, and mortality were adjusted to more closely reflect actual experience. In the 2011 valuation and later, the expectation of retired life mortality was changed to the RP-2000 Mortality Tables projected to 2020 with projection scale AA, set back one year for females rather than the 1994 Group Annuity Mortality Tables which was used prior to 2016. For the 2011 valuation through the 2013 valuation, an interest smoothing methodology was used to calculate liabilities for purposes of determining the actuarially determined contributions.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

Schedule of Net Pension Liability
Retirement Annuity Trust
(In Thousands)

	2024	2023	2022	2021	2020
Total Pension Liability	\$ 43,251,404	\$ 42,029,935	\$ 40,598,288	\$ 39,541,567	\$ 35,552,041
Plan Net Position	26,108,136	24,244,554	22,899,952	25,935,779	20,717,000
Net Pension Liability	<u>17,143,268</u>	<u>17,785,381</u>	<u>17,698,336</u>	<u>13,605,788</u>	<u>14,835,041</u>
Ratio of Plan Net Position to					
Total Pension Liability	60.36%	57.68%	56.41%	65.59%	58.27%
Covered Payroll	\$ 4,140,446	\$ 3,977,280	\$ 3,876,491	\$ 3,638,905	\$ 3,569,262
Net Pension Liability as					
a Percentage of Covered Payroll	414.04%	447.17%	456.56%	373.90%	415.63%
	2019	2018	2017	2016	2015
Total Pension Liability	\$ 34,666,795	\$ 33,708,555	\$ 46,966,822	\$ 47,736,901	\$ 42,476,699
Plan Net Position	20,371,910	19,981,633	18,707,699	16,812,832	18,049,131
Net Pension Liability	<u>14,294,885</u>	<u>13,726,922</u>	<u>28,259,123</u>	<u>30,924,069</u>	<u>24,427,568</u>
Ratio of Plan Net Position to					
Total Pension Liability	58.76%	59.28%	39.83%	35.22%	42.49%
Covered Payroll	\$ 3,497,216	\$ 3,455,660	\$ 3,415,432	\$ 3,390,539	\$ 3,455,008
Net Pension Liability as					
a Percentage of Covered Payroll	408.75%	397.23%	827.40%	912.07%	707.02%

NOTE 2: SCHEDULE OF EMPLOYER CONTRIBUTIONS

Schedule of Employer Contributions
Retirement Annuity Trust
(In Thousands)

Fiscal Year		Actual	Actuarially	Annual	Actual
Ended	Covered	Employer	Determined	Contribution	Contributions as a
June 30	Payroll	Contributions	Employer	Excess	% of Covered
			Contributions	(Deficiency)	Payroll
2024	\$ 4,140,446	\$ 1,178,682	\$ 1,178,682	\$ -	28.47%
2023	3,977,280	1,144,449	1,144,449	-	28.77%
2022	3,876,491	1,679,585	1,200,385	479,200	43.33%
2021	3,638,905	1,146,977	1,146,977	-	31.52%
2020	3,569,262	1,134,281	1,134,281	-	31.78%
2019	3,497,216	1,123,035	1,123,035	-	32.11%
2018	3,455,660	1,048,671	1,083,466	(34,795)	30.35%
2017	3,415,432	1,060,720	1,076,617	(15,897)	31.06%
2016	3,390,539	565,455	999,270	(433,815)	16.68%
2015	3,455,008	559,579	913,654	(354,075)	16.20%

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

NOTE 3: ACTUARIAL METHODS AND ASSUMPTIONS

The actuarially determined contribution rates in the Schedule of Employer Contributions are calculated as of June 30 on the three years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule.

Actuarial Cost Method	Entry age
Amortization Method	Level percentage of payroll, closed
Remaining Amortization Period	22.9 years
Asset Valuation Method	5-year smoothed fair value
Inflation	2.5%
Salary Increase	3.0 to 7.5%, including inflation
Investment Rate of Return	7.1%, net of pension plan investment expense, including inflation

Percentage shown is annual money-weighted rate of return, net of investment expense.

Schedule of Investment Returns
Retirement Annuity Trust

<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>
11.91%	10.24%	(10.91)%	29.57%	5.50%
<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
6.00%	10.50%	15.00%	(1.32)%	4.96%

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

Schedule of Changes in Net OPEB Liability
Health Insurance Trust
(In Thousands)

	2024	2023	2022	2021
Total OPEB Liability				
Service Cost	\$ 130,757	\$ 120,458	\$ 109,082	\$ 84,727
Interest	362,617	332,938	311,875	326,008
Change in Benefit Terms	-	-	-	-
Difference Between Expected and Actual Experience	(166,602)	(98,177)	(68,928)	(490,732)
Changes of Assumptions	184,394	196,990	60,667	516,431
Benefit Payments	(143,522)	(124,866)	(107,201)	(130,648)
Net Change in Total OPEB Liability	367,644	427,343	305,495	305,786
Total OPEB Liability - Beginning	5,179,049	4,751,706	4,446,211	4,140,425
Total OPEB Liability - Ending (a)	5,546,693	5,179,049	4,751,706	4,446,211
Plan Net Position				
Contributions - State	96,419	85,328	31,349	78,217
Contributions - Other Employers	127,902	123,488	120,416	106,670
Contributions - Active Members	155,327	149,210	145,682	128,117
Net Investment Income	340,293	243,051	(219,500)	503,201
Benefit Payments	(143,522)	(124,866)	(107,201)	(130,648)
Administrative Expense	(2,121)	(1,974)	(2,074)	(1,728)
Net Change in Plan Net Position	574,298	474,237	(31,328)	683,829
Plan Net Position - Beginning	2,743,413	2,269,176	2,300,504	1,616,675
Plan Net Position - Ending (b)	3,317,711	2,743,413	2,269,176	2,300,504
Net OPEB Liability - Ending (a)-(b)	\$ 2,228,982	\$ 2,435,636	\$ 2,482,530	\$ 2,145,707

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

Schedule of Changes in Net OPEB Liability
Health Insurance Trust
(In Thousands)

	2020	2019	2018	2017
Total OPEB Liability				
Service Cost	\$ 82,572	\$ 93,792	\$ 95,382	\$ 95,625
Interest	341,430	366,254	355,491	333,990
Change in Benefit Terms	-	-	-	8,926
Difference Between Expected and Actual Experience	(585,090)	(661,228)	(210,450)	-
Changes of Assumptions	106,575	45,659	56,483	-
Benefit Payments	<u>(145,869)</u>	<u>(163,666)</u>	<u>(161,082)</u>	<u>(178,500)</u>
Net Change in Total OPEB Liability	(200,382)	(319,189)	135,824	260,041
Total OPEB Liability - Beginning	<u>4,340,807</u>	<u>4,659,996</u>	<u>4,524,172</u>	<u>4,264,131</u>
Total OPEB Liability - Ending (a)	4,140,425	4,340,807	4,659,996	4,524,172
Plan Net Position				
Contributions - State	77,191	76,382	80,959	75,497
Contributions - Other Employers	107,434	106,764	106,143	104,879
Contributions - Active Members	133,471	131,677	130,778	128,819
Net Investment Income	32,475	74,385	76,841	95,453
Benefit Payments	(145,869)	(163,666)	(161,082)	(178,500)
Administrative Expense	<u>(2,047)</u>	<u>(1,803)</u>	<u>(1,748)</u>	<u>(1,539)</u>
Net Change in Plan Net Position	202,655	223,739	231,891	224,609
Plan Net Position - Beginning	<u>1,414,020</u>	<u>1,190,281</u>	<u>958,390</u>	<u>733,781</u>
Plan Net Position - Ending (b)	<u>1,616,675</u>	<u>1,414,020</u>	<u>1,190,281</u>	<u>958,390</u>
Net OPEB Liability - Ending (a)-(b)	<u>\$ 2,523,750</u>	<u>\$ 2,926,787</u>	<u>\$ 3,469,715</u>	<u>\$ 3,565,782</u>

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

NOTE 1: NET OPEB LIABILITY – HEALTH TRUST

The net OPEB liability contained in the following schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting. The net OPEB liability is measured as the total OPEB liability less the amount of the fiduciary net position of the system.

Changes of Benefit Terms. None

Changes of Assumptions. The health care trend rates, as well as morbidity factors, were updated to reflect future anticipated experience.

Schedule of Net OPEB Liability
Health Insurance Trust
(In Thousands)

	2024	2023	2022	2021
Total OPEB Liability	\$ 5,546,693	\$ 5,179,049	\$ 4,751,706	\$ 4,446,211
Plan Net Position	3,317,711	2,743,413	2,269,176	2,300,504
Net OPEB Liability	2,228,982	2,435,636	2,482,530	2,145,707
Ratio of Plan Net Position to				
Total OPEB Liability	59.81%	52.97%	47.75%	51.74%
Covered Payroll	\$ 4,140,446	\$ 3,977,280	\$ 3,876,491	\$ 3,638,905
Net OPEB Liability as				
a Percentage of Covered Payroll	53.83%	61.24%	64.04%	58.97%
	2020	2019	2018	2017
Total OPEB Liability	\$ 4,140,425	\$ 4,340,807	\$ 4,659,996	\$ 4,524,172
Plan Net Position	1,616,675	1,414,020	1,190,281	958,390
Net OPEB Liability	2,523,750	2,926,787	3,469,715	3,565,782
Ratio of Plan Net Position to				
Total OPEB Liability	39.05%	32.58%	25.54%	21.18%
Covered Payroll	\$ 3,569,262	\$ 3,497,216	\$ 3,455,660	\$ 3,415,432
Net OPEB Liability as				
a Percentage of Covered Payroll	70.71%	83.69%	100.41%	104.40%

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

NOTE 2: SCHEDULE OF EMPLOYER CONTRIBUTIONS

Schedule of Employer Contributions
Health Insurance Trust
(In Thousands)

	2024	2023	2022	2021	2020
Statutorily Required Contributions					
Employer	\$ 127,902	\$ 123,488	\$ 120,416	\$ 106,670	\$ 107,434
State					
Pre-65 Health Insurance Premiums	70,379	60,958	56,312	55,061	54,034
SEEK 0.75%	26,040	24,370	23,507	23,156	23,157
Total State	96,419	85,328	79,819	78,217	77,191
Total	224,321	208,816	200,235	184,887	184,625
Actual Contributions					
Employer	127,902	123,488	120,416	106,670	107,434
State	96,419	85,328	31,349	78,217	77,191
Total	224,321	208,816	151,765	184,887	184,625
Contribution Deficiency (Excess)	\$ -	\$ -	\$ 48,470	\$ -	\$ -
Percent of Statutorily Required Contributed Covered Payroll	100.00%	100.00%	75.79%	100.00%	100.00%
Actual Contributions as a Percentage of Covered Payroll	5.42%	5.25%	3.92%	5.08%	5.17%
	2019	2018	2017	2016	2015
Statutorily Required Contributions					
Employer	\$ 106,764	\$ 106,143	\$ 104,879	\$ 104,271	\$ 77,656
State					
Pre-65 Health Insurance Premiums	53,707	58,535	53,454	52,542	46,233
SEEK 0.75%	22,675	22,424	22,043	21,825	21,375
Total State	76,382	80,959	75,497	74,367	67,608
Total	183,146	187,102	180,376	178,638	145,264
Actual Contributions					
Employer	106,764	106,143	104,879	104,271	77,656
State	76,382	80,959	75,497	74,367	67,608
Total	183,146	187,102	180,376	178,638	145,264
Contribution Deficiency (Excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Percent of Statutorily Required Contributed Covered Payroll	100.00%	100.00%	100.00%	100.00%	100.00%
Actual Contributions as a Percentage of Covered Payroll	5.24%	5.41%	5.28%	5.27%	4.20%

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

NOTE 3: ACTUARIAL METHODS AND ASSUMPTIONS

The Health Insurance Trust is funded based on statutorily determined amounts as described in Note 8. The Schedule of Employer Contributions details the statutorily determined amounts for the Health Trust.

Percentage shown is annual money-weighted rate of return, net of investment expense.

Schedule of Investment Returns
Health Insurance Trust

<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>
12.40%	11.50%	(9.70)%	31.10%	2.30%
<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
6.11%	8.40%	14.37%	(2.20)%	1.38%

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

Schedule of Changes in Net OPEB Liability
Life Insurance Trust
(In Thousands)

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>
Total OPEB Liability				
Service Cost	\$ 1,078	\$ 1,035	\$ 943	\$ 1,289
Interest	8,463	8,263	8,337	8,926
Change in Benefit Terms	-	-	-	-
Difference Between Expected and Actual Experience	383	(308)	(4,123)	122
Changes of Assumptions	-	(1)	-	(5,792)
Benefit Payments	<u>(6,106)</u>	<u>(6,219)</u>	<u>(6,178)</u>	<u>(6,120)</u>
Net Change in Total OPEB Liability	3,818	2,770	(1,021)	(1,575)
Total OPEB Liability - Beginning	<u>122,254</u>	<u>119,484</u>	<u>120,505</u>	<u>122,080</u>
Total OPEB Liability - Ending (a)	126,072	122,254	119,484	120,505
 Plan Net Position				
Contributions - State	2,778	2,599	2,194	1,852
Contributions - Other Employers	579	624	561	286
Net Investment Income	10,315	8,683	(15,582)	24,075
Benefit Payments	(6,106)	(6,219)	(6,178)	(6,120)
Administrative Expense	<u>(37)</u>	<u>(38)</u>	<u>(41)</u>	<u>(34)</u>
Net Change in Plan Net Position	7,529	5,649	(19,046)	20,059
Plan Net Position - Beginning	<u>94,030</u>	<u>88,381</u>	<u>107,427</u>	<u>87,368</u>
Plan Net Position -Ending (b)	<u>101,559</u>	<u>94,030</u>	<u>88,381</u>	<u>107,427</u>
 Net OPEB Liability - Ending (a)-(b)	<u>\$ 24,513</u>	<u>\$ 28,224</u>	<u>\$ 31,103</u>	<u>\$ 13,078</u>

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

Schedule of Changes in Net OPEB Liability
Life Insurance Trust
(In Thousands)

	2020	2019	2018	2017
Total OPEB Liability				
Service Cost	\$ 1,299	\$ 1,271	\$ 1,068	\$ 1,067
Interest	8,563	8,256	8,026	7,761
Change in Benefit Terms	-	-	-	-
Difference Between Expected and Actual Experience	705	(204)	(717)	-
Changes of Assumptions	-	-	-	-
Benefit Payments	(5,317)	(5,153)	(5,453)	(5,151)
Net Change in Total OPEB Liability	5,250	4,170	2,924	3,677
Total OPEB Liability - Beginning	116,830	112,660	109,736	106,059
Total OPEB Liability - Ending (a)	122,080	116,830	112,660	109,736
Plan Net Position				
Contributions - State	1,543	1,209	897	882
Contributions - Other Employers	253	212	161	168
Net Investment Income	5,167	5,058	1,111	915
Benefit Payments	(5,317)	(5,153)	(5,453)	(5,151)
Administrative Expense	(36)	(30)	(31)	(28)
Net Change in Plan Net Position	1,610	1,296	(3,315)	(3,214)
Plan Net Position - Beginning	85,758	84,462	87,777	90,991
Plan Net Position -Ending (b)	87,368	85,758	84,462	87,777
Net OPEB Liability - Ending (a)-(b)	\$ 34,712	\$ 31,072	\$ 28,198	\$ 21,959

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

NOTE 1: NET OPEB LIABILITY – LIFE INSURANCE

The net OPEB liability contained in the following schedule was provided by TRS's actuary, Cavanaugh Macdonald Consulting. The net OPEB liability is measured as the total OPEB liability less the amount of the fiduciary net position of the system.

Changes of Benefit Terms. None

Changes of Assumptions. None

Schedule of Net OPEB Liability
Life Insurance Trust
(In Thousands)

	2024	2023	2022	2021
Total OPEB Liability	\$ 126,072	\$ 122,254	\$ 119,484	\$ 120,505
Plan Net Position	101,559	94,030	88,381	107,427
Net OPEB Liability	24,513	28,224	31,103	13,078
Ratio of Plan Net Position to				
Total OPEB Liability	80.56%	76.91%	73.97%	89.15%
Covered Payroll	\$ 4,140,446	\$ 3,977,280	\$ 3,876,491	\$ 3,638,905
Net OPEB Liability as				
a Percentage of Covered Payroll	0.59%	0.71%	0.80%	0.36%
	2020	2019	2018	2017
Total OPEB Liability	\$ 122,080	\$ 116,830	\$ 112,660	\$ 109,736
Plan Net Position	87,368	85,758	84,462	87,777
Net OPEB Liability	34,712	31,072	28,198	21,959
Ratio of Plan Net Position to				
Total OPEB Liability	71.57%	73.40%	74.97%	79.99%
Covered Payroll	\$ 3,569,262	\$ 3,497,216	\$ 3,455,660	\$ 3,415,432
Net OPEB Liability as				
a Percentage of Covered Payroll	0.97%	0.89%	0.82%	0.64%

Schedule is intended to show information for 10 years. Future years will be displayed as they become available.

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

NOTE 2: SCHEDULE OF EMPLOYER CONTRIBUTIONS

Schedule of Employer Contributions
Life Insurance Trust
(In Thousands)

Fiscal Year Ended June 30	Actuarially Determined Employer Contributions	Contributions in Relation to the Actuarially Determined Contributions	Annual Contribution Deficiency/ (Excess)	Covered Payroll	Actual Contributions as a % of Covered Payroll
2024	\$ 3,311	\$ 3,357	\$ (46)	\$ 4,140,446	0.08%
2023	3,269	\$ 3,223	46	3,977,280	0.08%
2022	2,736	2,755	(19)	3,876,491	0.07%
2021	2,252	2,138	114	3,638,905	0.06%
2020	1,843	1,796	47	3,569,262	0.05%
2019	1,082	1,421	(339)	3,497,216	0.04%
2018	1,075	1,058	17	3,455,660	0.03%
2017	1,065	1,050	15	3,415,432	0.03%
2016	1,058	1,038	20	3,390,539	0.03%
2015	1,050	1,020	30	3,455,008	0.03%

NOTE 3: ACTUARIAL METHODS AND ASSUMPTIONS

The actuarially determined contribution rates in the schedule of employer contributions are calculated as of June 30, 2021, valuation date. The following actuarial methods and assumptions were used to determine contribution rates reported in the most recent year of the schedule.

Actuarial Cost Method	Entry age normal
Amortization Period	Level percentage of payroll
Remaining Amortization Period	23 years, closed
Asset Valuation Method	5-year smoothed fair value
Inflation	2.5%
Real Wage Growth	0.25%
Wage Inflation	2.75%
Salary Increase	3.0 to 7.5%, including wage inflation
Discount Rate	7.1%

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
REQUIRED SUPPLEMENTARY INFORMATION
June 30, 2024
(Continued)

Percentage shown is annual money-weighted rate of return, net of investment expense.

Schedule of Investment Returns
 Life Insurance Trust

<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>
11.18%	9.63%	(14.96)%	28.17%	6.32%	6.49%

TRS began separate reporting of its Life Insurance Trust effective February 1, 2018. Previously, it was reported as part of the pension fund's gross and net performance. This schedule will show more history of the trust as it becomes available.

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ADDITIONAL SUPPORTING SCHEDULES

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
ADDITIONAL SUPPORTING SCHEDULES
June 30, 2024

Schedule of Administrative Expenses
For the Years Ended June 30, 2024 and 2023

	<u>2024</u>	<u>2023</u>
Salaries	\$ 9,253,137	\$ 8,720,717
Other Personnel Costs	893,481	793,003
Professional Services and Contracts	497,956	566,604
Utilities	87,920	91,979
Rentals	21,275	17,738
Maintenance	70,735	68,477
Postage and Related Services	557,762	553,724
Printing	182,322	121,430
Insurance	177,425	195,171
Miscellaneous Services	172,033	173,737
Telecommunications	31,243	22,318
Computer Services	32,024	31,419
Supplies	25,944	25,314
Depreciation	1,803,758	2,055,970
Travel	48,705	47,500
Dues and Subscriptions	125,281	135,220
Miscellaneous Commodities	60,132	51,400
Office Systems and Equipment	2,676,885	2,604,647
Compensated Absences	247,313	207,211
Total	<u>\$ 16,965,331</u>	<u>\$ 16,483,579</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
ADDITIONAL SUPPORTING SCHEDULES
June 30, 2024
(Continued)

Schedule of Professional Services and Contracts
For the Years Ended June 30, 2024 and 2023

	<u>Nature of Service</u>	<u>2024</u>	<u>2023</u>
Cavanaugh Macdonald Consulting	Actuarial	\$ 211,302	\$ 237,871
Blue & Co.	Auditing	96,600	96,720
Milliman	Auditing	-	54,200
Ice Miller	Attorney	18,686	9,239
Stoll Keenon and Ogden	Attorney	2,138	12,137
Williams & Jensen	Attorney	67,230	45,000
Wyatt, Tarrant & Combs	Attorney	-	9,437
Mulloy Borland	Communications	102,000	102,000
Total		<u>\$ 497,956</u>	<u>\$ 566,604</u>

TEACHERS' RETIREMENT SYSTEM OF THE STATE OF KENTUCKY
ADDITIONAL SUPPORTING SCHEDULES
June 30, 2024
(Continued)

Schedule of Contracted Investment Management Expenses
Fiscal Year Ended June 30, 2024

	Retirement Annuity Trust*	Health Insurance Trust	Life Insurance Trust	Total
Equity Managers	\$ 18,602,954	\$ 635,729	\$ 31,118	\$ 19,269,801
Fixed Income Managers	573,146	-	-	573,146
Real Estate	19,431,581	2,686,359	126,004	22,243,944
Additional Categories	10,487,453	1,792,440	1,927	12,281,820
Alternative Investments	26,413,248	3,324,191	72,173	29,809,612
Custodian	684,924	179,276	62,457	926,657
Consultant	544,736	-	-	544,736
Legal and Research	224,303	-	-	224,303
Other (Administrative and Operational)	4,944,759	431,998	13,837	5,390,594
Total	<u>\$ 81,907,104</u>	<u>\$ 9,049,993</u>	<u>\$ 307,516</u>	<u>\$ 91,264,613</u>

**Does not include expenses for the 403(b) Tax-Sheltered Trust and Losey Scholarship Fund.*

Schedule of Contracted Investment Management Expenses
Fiscal Year Ended June 30, 2023

	Retirement Annuity Trust*	Health Insurance Trust	Life Insurance Trust	Total
Equity Managers	\$ 19,128,270	\$ 544,385	\$ 32,157	\$ 19,704,812
Fixed Income Managers	534,711	-	-	534,711
Real Estate	16,538,710	2,285,720	115,600	18,940,030
Additional Categories	10,261,835	1,567,032	1,788	11,830,655
Alternative Investments	26,148,410	3,477,929	76,086	29,702,425
Custodian	676,584	186,517	46,130	909,231
Consultant	493,850	-	-	493,850
Legal and Research	269,676	-	-	269,676
Other (Administrative and Operational)	4,841,797	346,017	13,393	5,201,207
Total	<u>\$ 78,893,843</u>	<u>\$ 8,407,600</u>	<u>\$ 285,154</u>	<u>\$ 87,586,597</u>

**Does not include expenses for the 403(b) Tax-Sheltered Trust and Losey Scholarship Fund.*

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**REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON
COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL
STATEMENTS PERFORMED IN ACCORDANCE WITH
*GOVERNMENT AUDITING STANDARDS***



ALLISON BALL
AUDITOR OF PUBLIC ACCOUNTS

Report On Internal Control Over Financial Reporting And
On Compliance And Other Matters Based On An Audit Of Financial
Statements Performed In Accordance With Government Auditing Standards

Independent Auditor's Report

To the Board of Trustees
Teachers' Retirement System of the State of Kentucky
Frankfort, Kentucky

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Teachers' Retirement System of the State of Kentucky (TRS) as of and for the year ended June 30, 2024, and the related notes to the financial statements, which collectively comprise TRS's basic financial statements, and have issued our report thereon dated November 15, 2024.

Report on Internal Control Over Financial Reporting

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

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

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

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Report On Internal Control Over Financial Reporting
And On Compliance And Other Matters Based On An Audit Of Financial Statements
Performed In Accordance With *Government Auditing Standards*
(Continued)

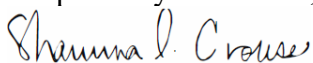
Report on Compliance and Other Matters

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

Purpose of this Report

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

Respectfully Submitted,



Shawna Crouse, CPA

Assistant Auditor of Public Accounts

Frankfort, KY

November 15, 2024