



# TEACHERS' RETIREMENT SYSTEM

of the State of Kentucky

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**GARY L. HARBIN, CPA**  
Executive Secretary

## Quarterly Meeting of the TRS Board of Trustees

### A G E N D A

Monday, December 18, 2023, 9:30 a.m. ET

- Meeting Called to Order
- Roll Call
  1. Reports for Consent
    - 1.1. Consideration/Approval of Minutes
      - 1.1.1. Quarterly Meeting, Board of Trustees, September 18, 2023
      - 1.1.2. Special Meeting, Board of Trustees, November 20, 2023
      - 1.1.3. Special Meeting, Insurance Committee, September 18, 2023
      - 1.1.4. Special Meeting, Governance & Audit Committee, November 14, 2023
      - 1.1.5. Special Meeting, Personnel Committee, November 20, 2023
    - 1.2. Applications for Retirement and Annuity
    - 1.3. Survivor Benefits
    - 1.4. Life Insurance Benefits
    - 1.5. Refunds
    - 1.6. Interim Financial Statements
  2. Report of the Investment Committee
  3. Report of the Governance and Audit Committee
  4. Report of the Insurance Committee
  5. Report of the Scholarship Committee
  6. Report of the Personnel Committee
  7. Executive Secretary's Observations and Comments
- General Discussion
- Adjournment

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

FROM: Gary L. Harbin, CPA  
Executive Secretary

DATE: December 18, 2023

SUBJECT: Reports for Consent

1.1. Consideration/Approval of Minutes

- 1.1.1. Quarterly Meeting, Board of Trustees, September 18, 2023
- 1.1.2. Special Meeting, Board of Trustees, November 20, 2023
- 1.1.3. Special Meeting, Insurance Committee, September 18, 2023
- 1.1.4. Special Meeting, Governance and Audit Committee, November 14, 2023
- 1.1.5. Special Meeting, Personnel Committee, November 20, 2023

Recommendation: The board and committees are requested to approve the minutes as presented.

1.2. Applications for Retirement and Annuity

The list of members who retired in September, October and November is included in the board materials. Attached is a summary of the payments and a comparison to the same period last year. Initial retirements for the period included 379 retirees with monthly payments totaling \$1,144,889.19. During the same period last year, 418 retirements resulted in monthly payments totaling \$1,256,385.72.

Recommendation: The board is requested to approve the initial payments listed as reported.

1.3. Survivor Benefits

The list of persons qualifying for survivor benefit payments for the quarter ended September 30 is included in the board materials. Eleven survivor benefits commenced with a total monthly payment of \$4,189.34.

Recommendation: The board is requested to approve the survivor benefit payments as reported.

1.4. Life Insurance Benefits

The list of payments of life insurance benefits due to death of active and retired teachers for the quarter ended September 30 is included in the board materials. Five payments to the estates or beneficiaries of active teachers and 304 payments to the estates or beneficiaries of retired teachers combined for total payments of \$1,530,000. During the same quarter last year, 356 payments amounted to \$1,741,000.

Recommendation: The board is requested to approve the payment of life insurance benefits as reported.

1.5. Refunds

The report of refunds for the quarter ended September 30 is included in the board materials. During the quarter, refunds paid consisted of:

Regular withdrawals	540	\$7,675,206.74
Deaths	<u>32</u>	<u>\$ 506,937.32</u>
Total	572	\$8,182,144.06

During the same quarter last year, 544 refunds totaled \$8,644,056.00.

Recommendation: The board is requested to approve the payment of refunds as reported.

1.6. Interim Financial Statements

The Interim Financial Statements for the quarter ended September 30 are included in the board materials.

Recommendation: The Interim Financial Statements are provided for informational purposes only and require no action.

**Teachers' Retirement System of Kentucky**  
**Initial Applications for Retirement and Annuity**  
**2023**

	September	October	November	Total	Same Period 2022
<b>Handicapped Child</b>	<i>0</i> \$0.00	<i>0</i> \$0.00	<i>0</i> \$0.00	<i>0</i> \$0.00	<i>0</i> \$0.00
<b>Disability Retirement</b>	<i>6</i> \$17,059.77	<i>4</i> \$11,511.14	<i>7</i> \$20,003.36	<i>17</i> \$48,574.27	<i>22</i> \$63,718.81
<b>Service Retirement</b>	<i>166</i> \$503,921.64	<i>114</i> \$346,794.29	<i>81</i> \$241,274.19	<i>361</i> \$1,091,990.12	<i>394</i> \$1,188,102.83
<b>Beneficiary of Member Eligible to Retire</b>	<i>1</i> \$4,324.80	<i>0</i> \$0.00	<i>0</i> \$0.00	<i>1</i> \$4,324.80	<i>2</i> \$4,564.08
<b>TOTALS</b>	<i>173</i> \$525,306.21	<i>118</i> \$358,305.43	<i>88</i> \$261,277.55	<i>379</i> \$1,144,889.19	<i>418</i> \$1,256,385.72

**Reports for Consent  
Member Account Refunds  
For the period July 2023 - September 2023**

<b>Active Refunds</b>	<b>Count</b>	<b>Net Refund</b>	<b>Taxes Withheld</b>	<b>Rollovers</b>	<b>Total</b>
July	117	739,919.81	184,980.00	247,769.78	1,172,669.59
August	165	1,379,186.47	348,041.06	971,328.68	2,698,556.21
September	259	1,967,912.90	491,970.16	1,344,097.88	3,803,980.94
<b>Total</b>	<b>540</b>				<b>7,675,206.74</b>

<b>Deceased Refunds</b>	<b>Count</b>	<b>Net Refund</b>	<b>Taxes Withheld</b>	<b>Rollovers</b>	<b>Total</b>
July	10	10,645.00	1,633.47	29,114.17	41,392.64
August	12	17,828.78	4,451.45	95,713.42	117,993.65
September	10	247,983.01	48,085.82	51,482.20	347,551.03
<b>Total</b>	<b>32</b>				<b>506,937.32</b>

<b>Total Refunds</b>	<b>Count</b>	<b>Net Refund</b>	<b>Taxes Withheld</b>	<b>Rollovers</b>	<b>Total</b>
July	127	750,564.81	186,613.47	276,883.95	1,214,062.23
August	177	1,397,015.25	352,492.51	1,067,042.10	2,816,549.86
September	269	2,215,895.91	540,055.98	1,395,580.08	4,151,531.97
<b>Total</b>	<b>572</b>				<b>8,182,144.06</b>

# TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY



*INTERIM FINANCIAL STATEMENTS*

**QUARTER ENDED SEPTEMBER 30, 2023**

(FAIR VALUE - UNAUDITED)

**Statements of Plan Net Assets**  
**as of September 30, 2023 and 2022**  
(Fair Value - Unadjusted & Unaudited )

	Retirement Annuity Trust		Health Insurance Trust		Life Insurance Trust		Other Funds		TOTAL	
	FY 2024	FY 2023	FY 2024	FY 2023	FY 2024	FY 2023	FY 2024	FY 2023	FY 2024	FY 2023
<b>ASSETS</b>										
Cash	\$ 199,929,584	\$ 329,268,090	\$ 241,593,373	\$ 177,000,093	\$ 431,935	\$ 114,960	\$ 204,514	\$ 74,667	\$ 442,159,406	\$ 506,457,810
<b>Receivables</b>										
Contributions	48,576,918	50,526,572	12,068,376	14,111,640	60,464	54,426			60,705,758	64,692,638
Investment Income	59,043,290	49,654,767	5,424,732	3,099,024	319,147	290,175	4,380	3,160	64,791,549	53,047,126
Investment Sales Receivable	10,982,263	38,414,566	1,939,283	373,364,361	-	18,694			12,921,546	411,797,621
Installment Account Receivable	16,640	50,314							16,640	50,314
Other Receivables	21,638	24,667	46,972,936	37,307,867					46,994,574	37,332,534
Due from Other Funds	7,977,382	5,964,536							7,977,382	5,964,536
<b>Total Receivables</b>	<b>126,618,131</b>	<b>144,635,422</b>	<b>66,405,327</b>	<b>427,882,892</b>	<b>379,611</b>	<b>363,295</b>	<b>4,380</b>	<b>3,160</b>	<b>193,407,449</b>	<b>572,884,769</b>
<b>Investments at Market Value</b>										
Short Term Investments	583,457,006	657,444,055	162,164,951	74,553,031	7,323,769	5,931,862	361,402	349,314	753,307,128	738,278,262
Bonds and Mortgages	2,760,998,778	3,145,147,130	154,082,298	143,871,821	16,188,082	18,206,636	195,468	215,360	2,931,464,626	3,307,440,947
Stocks	13,603,687,891	11,638,682,393	1,357,596,050	1,085,589,815	51,423,029	45,146,610	475,885	398,045	15,013,182,855	12,769,816,863
Alternative Investments	1,976,515,671	2,245,459,327	225,739,842	194,941,557	5,418,011	3,539,053			2,207,673,524	2,443,939,937
Real Estate	1,751,230,449	1,751,171,058	156,290,589	157,598,759	6,641,726	7,911,721			1,914,162,764	1,916,681,538
Additional Categories	2,515,710,927	1,850,225,327	415,803,072	362,183,566	2,839,363	2,751,682			2,934,353,362	2,215,160,575
<b>Total Investments</b>	<b>23,191,600,722</b>	<b>21,288,129,290</b>	<b>2,471,676,802</b>	<b>2,018,738,549</b>	<b>89,833,980</b>	<b>83,487,564</b>	<b>1,032,755</b>	<b>962,719</b>	<b>25,754,144,259</b>	<b>23,391,318,122</b>
Capital Assets ( net of accumulated depreciation )	7,466,047	9,255,981							7,466,047	9,255,981
<b>Total Assets</b>	<b>23,525,614,484</b>	<b>21,771,288,783</b>	<b>2,779,675,502</b>	<b>2,623,621,534</b>	<b>90,645,526</b>	<b>83,965,819</b>	<b>1,241,649</b>	<b>1,040,546</b>	<b>26,397,177,161</b>	<b>24,479,916,682</b>
<b>LIABILITIES</b>										
<b>Liabilities</b>										
Accrued Expenses and Other Liabilities	2,302,167	2,072,512	13,062,293	5,769,356					15,364,460	7,841,868
State of Kentucky	29,211,585	26,943,547	10,443,709	119,901	39,839	62,105			39,695,133	27,125,553
Investment Purchases Payable	31,659,310	44,487,470	6,421,705	374,434,213	-	30,619	-	-	38,081,015	418,952,302
Investment Fees Payable	19,469,192	15,073,093	2,290,078	1,610,807	72,654	49,320	-	-	21,831,924	16,733,220
Due to Other Funds	-	-	7,823,791	5,849,474	149,111	111,477	4,480	3,585	7,977,382	5,964,536
<b>Total Liabilities</b>	<b>82,642,254</b>	<b>88,576,622</b>	<b>40,041,576</b>	<b>387,783,751</b>	<b>261,604</b>	<b>253,521</b>	<b>4,480</b>	<b>3,585</b>	<b>122,949,914</b>	<b>476,617,479</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>	<b>\$ 23,442,972,230</b>	<b>\$ 21,682,712,161</b>	<b>\$ 2,739,633,926</b>	<b>\$ 2,235,837,783</b>	<b>\$ 90,383,922</b>	<b>\$ 83,712,298</b>	<b>\$ 1,237,169</b>	<b>\$ 1,036,961</b>	<b>\$ 26,274,227,247</b>	<b>\$ 24,003,299,203</b>

**Statements of Changes in Plan Net Assets**  
**For the Three Months Ended September 30, 2023 and 2022**  
(Fair Value - Unadjusted & Unaudited )

	Retirement Annuity Trust		Health Insurance Trust		Life Insurance Trust		Other Funds		TOTAL	
	FY 2024	FY 2023	FY 2024	FY 2023	FY 2024	FY 2023	FY 2024	FY 2023	FY 2024	FY 2023
<b>ADDITIONS</b>										
<b>Contributions</b>										
Employer- State Paid	\$ 247,378,939	\$ 242,726,913	\$ 24,487,799	\$ 22,229,996	\$ 518,241	\$ 435,850	\$ -	\$ -	\$ 272,384,979	\$ 265,392,759
Employer- LSD, Other	20,768,237	22,317,262	24,401,549	21,964,711	149,393	128,595	-	-	45,319,179	44,410,568
Member- Active	74,492,652	66,156,325	29,118,569	26,591,069			868	618	103,612,089	92,748,012
Member- Retired			15,990,362	16,144,473					15,990,362	16,144,473
Recovery Income			31,591,740	25,448,989					31,591,740	25,448,989
<b>Total Contribution</b>	<b>342,639,828</b>	<b>331,200,500</b>	<b>125,590,019</b>	<b>112,379,238</b>	<b>667,634</b>	<b>564,445</b>	<b>868</b>	<b>618</b>	<b>468,898,349</b>	<b>444,144,801</b>
<b>Investment Income/(Loss)</b>										
<b>Net Appreciation/(Depreciation) in Fair Value of Investments</b>										
Interest	54,324,032	44,792,902	9,416,615	4,749,598	243,516	180,030	6,517	1,361	63,990,680	49,723,891
Dividends	63,790,665	58,708,668	4,089,902	1,066,837	153,220	176,060	1,720	1,656	68,035,507	59,953,221
Rental Income, Net	5,488,196	5,022,782							5,488,196	5,022,782
Securities Lending, Net	675,713	694,434			9,316	17,464	111	203	685,140	712,101
<b>Gross Investment Income</b>	<b>(493,381,366)</b>	<b>(921,182,698)</b>	<b>(40,141,528)</b>	<b>(62,767,853)</b>	<b>(2,722,026)</b>	<b>(3,476,225)</b>	<b>(28,991)</b>	<b>(42,159)</b>	<b>(536,273,911)</b>	<b>(987,468,935)</b>
<b>Less Investment Expense</b>	<b>(20,308,655)</b>	<b>(15,949,031)</b>	<b>(2,177,124)</b>	<b>(1,561,799)</b>	<b>(58,601)</b>	<b>(39,895)</b>	<b>-</b>	<b>-</b>	<b>(22,544,380)</b>	<b>(17,550,725)</b>
<b>Net Investment Income</b>	<b>(513,690,021)</b>	<b>(937,131,729)</b>	<b>(42,318,652)</b>	<b>(64,329,652)</b>	<b>(2,780,627)</b>	<b>(3,516,120)</b>	<b>(28,991)</b>	<b>(42,159)</b>	<b>(558,818,291)</b>	<b>(1,005,019,660)</b>
<b>Total Additions</b>	<b>(171,050,193)</b>	<b>(605,931,229)</b>	<b>83,271,367</b>	<b>48,049,586</b>	<b>(2,112,993)</b>	<b>(2,951,675)</b>	<b>(28,123)</b>	<b>(41,541)</b>	<b>(89,919,942)</b>	<b>(560,874,859)</b>
<b>DEDUCTIONS</b>										
Benefits	618,648,028	599,034,054			1,533,000	1,716,530	11,518	37,856	620,192,546	600,788,440
Refunds of Contributions	8,035,004	8,640,592							8,035,004	8,640,592
Under 65 Insurance Expenses			26,802,338	25,855,025					26,802,338	25,855,025
Over 65 Insurance Expenses			60,248,184	55,532,467					60,248,184	55,532,467
Administrative Expense	3,848,670	3,634,334	-	-	-	-	-	-	3,848,670	3,634,334
<b>Total Deductions</b>	<b>630,531,702</b>	<b>611,308,980</b>	<b>87,050,522</b>	<b>81,387,492</b>	<b>1,533,000</b>	<b>1,716,530</b>	<b>11,518</b>	<b>37,856</b>	<b>719,126,742</b>	<b>694,450,858</b>
<b>Net Increase ( Decrease )</b>	<b>(801,581,895)</b>	<b>(1,217,240,209)</b>	<b>(3,779,155)</b>	<b>(33,337,906)</b>	<b>(3,645,993)</b>	<b>(4,668,205)</b>	<b>(39,641)</b>	<b>(79,397)</b>	<b>(809,046,684)</b>	<b>(1,255,325,717)</b>
<b>NET ASSETS HELD IN TRUST FOR PENSION BENEFITS</b>										
Beginning of year	24,244,554,125	22,899,952,370	2,743,413,081	2,269,175,689	94,029,915	88,380,503	1,276,810	1,116,358	27,083,273,931	25,258,624,920
Ending of period	\$ 23,442,972,230	\$ 21,682,712,161	\$ 2,739,633,926	\$ 2,235,837,783	\$ 90,383,922	\$ 83,712,298	\$ 1,237,169	\$ 1,036,961	\$ 26,274,227,247	\$ 24,003,299,203



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

FROM: Gary L. Harbin, CPA  
Executive Secretary

DATE: December 18, 2023

RE: Report of the Investment Committee

1. Investment Committee Meeting and Actions: New investments presented at the November 16 Investment Committee meeting were as follows: an investment in Hellman and Friedman Capital Partners XI of \$50 million from the Retirement Annuity Trust, \$10 million from the Health Insurance Trust and \$500,000 from the Life Insurance Trust; and an investment in Carlyle European Partners VI of \$50 million from the Retirement Annuity Trust, \$10 million from the Health Insurance Trust and \$500,000 from the Life Insurance Trust.

The committee also approved the proxy voting report for the quarter ended June 30 and reported it to the board (report). As required by law, the report will be published on the TRS website.

Outside manager Fort Washington Investment Advisors presented a review of its portfolios.

2. Purchases and Disposals: During the quarter, 2,451 purchases amounted to \$3,115,184,973.49 and 2,312 disposals amounted to \$3,063,844,440.06. Disposals consisted of 1,999 sales, 277 principal payments and 36 redemptions. While TRS initiates each of these transactions, the custodian of securities is responsible for handling and securing each stock, bond or other type of investment. At the end of the quarter, TRS's invested securities had a book value of \$18,673,675,956.17 and a market value of \$23,191,915,198.12.

3. Staff's Comments on Economic and Market Conditions: The outlook for investors was complicated during the quarter by an uptick in consumer prices, a downgrade to the U.S. debt rating, ongoing organized labor issues and uncertainty around a possible U.S. government shutdown. As the prospect of a "higher-for-longer" outlook for interest rates was digested by investors, they also saw increased volatility and negative returns in equity market during the latter part of the quarter. Global equities, as represented by the MSCI All Country World Index, declined 3.4%, while global fixed income, as represented by the Bloomberg Global Aggregate Bond Index, fell 3.6%. Among investors, focus increased on the behavior and financial health of the U.S. consumer. Although labor market data releases exceeded expectations, concerns increased about a decline in consumer spending because of rising energy costs and mortgage rates, as well as the resumption of student loan payments following a multi-year pause. Global central banks and policymakers have continued to focus on the balance between maintaining downward pressure on inflation and avoiding significant disruption to economic growth. The Federal Open Markets Committee (FOMC) paused rate hikes during its September meeting — marking only the second pause since March 2022 — but it also indicated that an additional rate increase should be expected before the end of December.

During the quarter, U.S. equity markets reversed into negative territory after an extended rebound in the prior two quarters. In the last half of fiscal 2023, growth-oriented companies, particularly the largest ones within the universe, primarily drove U.S. equity returns. However, the performance of these mega-cap companies was mixed. Apple, Amazon and Microsoft each delivered negative returns, while Alphabet and NVIDIA provided some balance with positive returns. Among the sector returns, only the communications services and energy sectors provided positive results, with the latter far outpacing other sectors. By size, large-cap stocks fared better than mid-and small-cap stocks. From a style standpoint, no major dispersion between growth and value stocks was seen among large- and mid-cap stocks. However, within small-cap, value stocks significantly outperformed growth stocks. Biotechnology stocks, which represent a significant portion of the small-cap growth space, experienced a sharp decline. Compared to previous quarters, active large-cap managers generated higher excess returns on average due to reversals in some of the largest, best-performing stocks and overall increased market volatility.

Developed international stocks lagged both U.S. and emerging markets during the quarter. On the style front, developed international value stocks outperformed growth stocks. Small-cap stocks outperformed large-cap stocks, but not significantly. A key bright spot for international markets was the energy sector, which was the only sector to end with positive returns. Production cuts, which are expected to last until the end of the calendar year, drove relatively positive sentiment around the energy sector. Despite the oil price spike, most European countries saw inflation slow. While the overall inflation rate in Europe trended lower and dropped to 4.3%, the European Central Bank raised rates at its latest meeting. Emerging markets equity outperformed developed markets. Similarly, value outperformed growth due to a strong showing from the energy sector. Small-cap stocks outperformed large-cap by a sizeable margin. China continued to struggle but saw some improvement in retail sales and industrial production in August. Subsequently, the Chinese Communist Party continued to engage in stimulus, lowering reserve requirements and rates.

The Fed increased rates by a quarter of a percent in July and made no change in September. The FOMC reaffirmed its target of 2% inflation. Treasury yields rose steadily, with the 10-year increase of 0.78% ending at 4.59%. The yield curve became less inverted as investors sought higher income for longer maturities. Amid this backdrop, the Bloomberg U.S. Aggregate Bond Index fell 3.2%, while the Bloomberg U.S. Corporate High Yield Index returned 0.5%, as lower-rated bonds outperformed during the quarter.

Core private real estate declined 2%, as reported by the NFI-ODCE Index. The total return comprised of 0.9% from income and a 2.9% price depreciation. Income returns remained steady compared to the prior quarter while continuing at the lower end of historical levels. Private real estate markets continued trends similar to previous quarters, with headwinds persisting from capital markets disruptions. The sector remained volatile, with the resetting of pricing expectations increasing borrowing costs. Transaction markets were muted with wide bid-ask spreads as investors remained cautious, leading to limited liquidity. The office sector remains the most challenged as it relates to operating fundamentals with weakness in buyer interest, vacancy, leasing velocity and the ability to refinance debt in the current environment.

Investment performance for the quarter was soft with private assets outperforming public assets. The Retirement Annuity Trust's portfolio fell 2.09% for the quarter, compared to the policy index that declined 2.51%. TRS's domestic equity fell 2.9%, outperforming the S&P 1500 Stock index that declined 3.36%. TRS's international stocks fell 4.67%, underperforming the MSCI All Country ex U.S. index, which declined 3.37%. Real estate fell 0.54%. TRS's fixed income fell 2.84%, outperforming the Bloomberg Barclays Gov/Credit Bond index that declined 3%. Additional categories returned 1.37%, and private equity returned 2.3% for the quarter.

Recommendation: The executive secretary recommends that the board accept and ratify the Report of the Investment Committee.

*Teachers' Retirement System of the State of Kentucky*  
*Retirement Annuity Trust*  
*Quarterly Investment Performance*  
*Gross Returns*  
*For the Period Ended September 30, 2023*

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
<b>TOTAL PLAN</b>	\$ 23,191,915,198.12	-2.09	-2.09	12.96	5.68	6.46	7.71	7.27
<i>Policy Benchmark</i>		-2.51	-2.51	14.61	6.38	6.57	7.66	-
<b><u>Total Equity</u></b>	\$ 13,748,595,476.00	-3.46	-3.46	20.86	6.62	7.07	9.06	8.36
<b><u>Domestic Equity</u></b>	\$ 9,403,661,225.36	-2.90	-2.90	20.56	9.45	8.93	11.12	9.60
<i>S&amp;P 1500 Index</i>		-3.36	-3.36	20.98	10.31	9.50	11.61	9.78
<b><u>All-Cap Equities</u></b>	\$ 566,932,768.15	-4.33	-4.33	22.40	11.34	11.28	-	-
<i>Russell 3000 Index</i>		-3.25	-3.25	10.46	9.38	9.14	-	-
<b><u>Large-Cap Equities</u></b>	\$ 7,638,174,883.87	-2.44	-2.44	21.92	9.60	9.54	11.47	9.72
<i>S&amp;P 500 Index</i>		-3.27	-3.27	21.62	10.15	9.92	11.91	9.72
<b><u>Mid-Cap Equities</u></b>	\$ 698,517,883.44	-5.60	-5.60	12.01	6.57	4.57	8.88	-
<i>S&amp;P 400 Index</i>		-4.20	-4.20	15.51	12.05	6.06	8.94	-
<b><u>Small-Cap Equities</u></b>	\$ 500,035,733.16	-4.64	-4.64	10.55	9.88	3.67	8.23	-
<i>S&amp;P 600 Index</i>		-4.93	4.93	10.08	12.10	3.21	8.15	-
<b><u>International Equity</u></b>	\$ 4,344,934,250.64	-4.67	-4.67	21.60	0.93	3.31	4.73	-
<i>MSCI AC World Ex US</i>		-3.68	-3.68	21.02	4.24	3.07	3.83	-
<b><u>Fixed Income</u></b>	\$ 3,003,023,690.82	-2.84	-2.84	1.23	-4.95	0.81	1.74	3.53
<i>Bloomberg Barclays Govt/Credit Index</i>		-3.00	-3.00	0.93	-5.32	0.41	1.31	2.90
<b><u>Real Estate</u></b>	\$ 1,751,230,448.57	-0.54	-0.54	-3.17	10.35	8.38	9.84	8.69
<b><u>In House Real Estate Equity</u></b>	\$ 401,370,071.73	1.37	1.37	5.71	4.86	4.74	7.14	7.98
<i>CPI plus 2%</i>		1.70	1.70	5.76	7.86	6.13	4.84	4.62
<b><u>Core Real Estate</u></b>	\$ 881,246,304.24	-1.61	-1.61	-5.77	10.53	8.69	10.03	-
<i>NCREIF ODCE (VW) Index</i>		-1.90	-1.90	-12.14	7.13	5.65	8.16	-
<b><u>Non-Core Real Estate</u></b>	\$ 468,614,072.60	-0.17	-0.17	-5.25	16.04	11.94	14.19	-
<i>NCREIF Property Index</i>		-1.37	-1.37	-8.39	6.04	5.26	7.40	-
<b><u>Private Equity</u></b>	\$ 1,976,515,670.58	2.30	2.30	6.16	20.24	14.64	14.10	-
<b><u>Mature Private Equity</u></b>	\$ 1,120,199,512.12	2.40	2.40	5.65	20.31	13.19	12.64	-
<i>S&amp;P 500 Index plus 3%</i>		-2.56	-2.56	25.27	13.45	13.21	15.27	-
<b><u>Private Equity &lt; 5 Years</u></b>	\$ 856,316,158.46	2.25	2.25	8.36	22.57	17.30	-	-
<b><u>Timberland</u></b>	\$ 487,332,986.38	2.27	2.27	7.19	3.02	3.50	3.48	-
<i>NCREIF Timberland Index</i>		1.37	1.37	10.03	9.15	5.87	5.93	-
<b><u>Additional Categories</u></b>	\$ 2,066,950,693.07	1.37	1.37	7.70	4.83	4.27	4.63	-
<i>B of A Merrill Lynch U.S. High Yield Master II Constrained</i>		0.53	0.53	10.19	1.82	2.78	4.16	-
<b>Cash (Unallocated)</b>	\$ 158,266,189.44	1.39	1.39	4.38	1.73	1.64	1.11	1.58
<i>90 Day T-Bill</i>		1.31	1.31	4.47	1.70	1.72	1.10	1.37

**Total Trust Gross Return for 30-year period\***

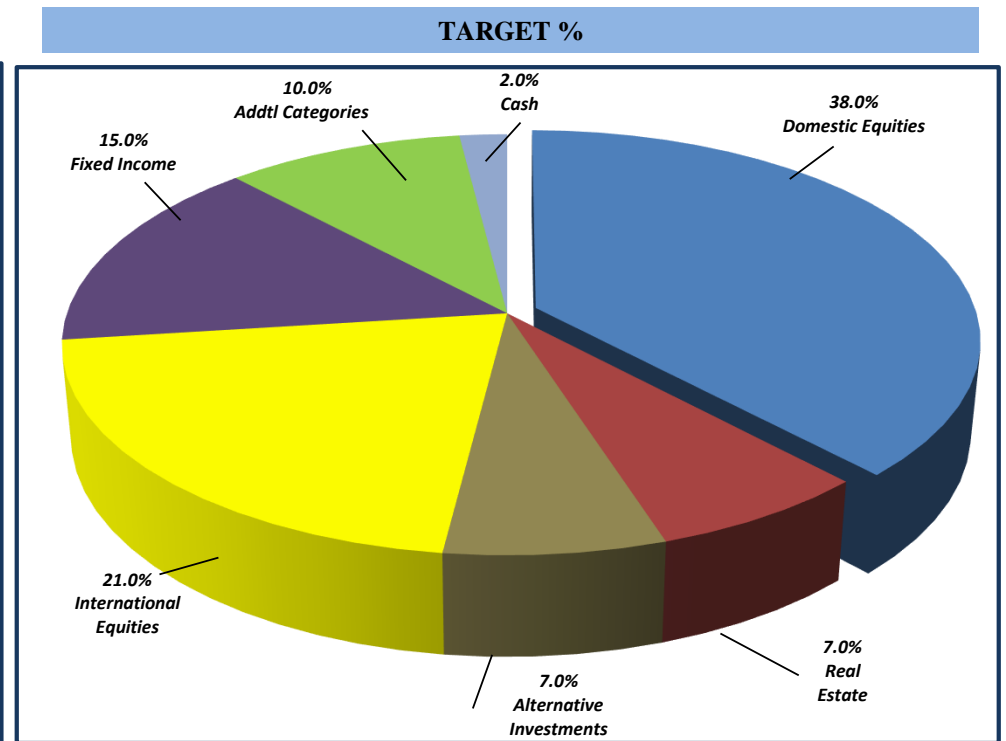
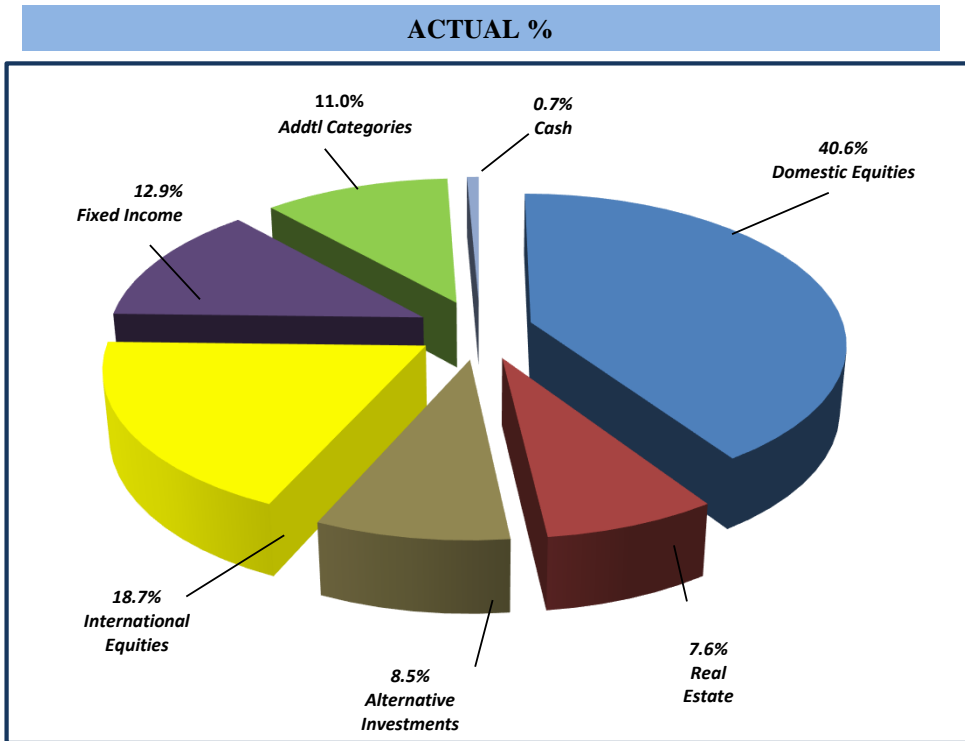
**7.53**

\*Returns are annualized for periods longer than one year

\*\* Prior to July 1, 2008, TRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index that represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal year.

**Teachers' Retirement System of Kentucky**  
 Quarterly Investment Update  
 For the period ended September 30, 2023

(\$ in millions)	\$'s	9/30/2023 Actual %	6/30/2023 Actual %	Target %	Strategic Ranges
Domestic Equities	\$9,403.6	40.6%	39.0%	38.0%	29.0 - 40.0%
Real Estate	1,751.2	7.6%	7.4%	7.0%	4.0 - 10.0%
Alternative Inv.	1,976.5	8.5%	8.0%	7.0%	4.0 - 10.0%
International Equities	4,345.0	18.7%	21.4%	21.0%	16.0 - 27.0%
Fixed Income	3,003.0	12.9%	13.0%	15.0%	8.0 - 22.0%
Addtl Categories	2,554.3	11.0%	10.3%	10.0%	4.0 - 15.0%
Cash	158.3	0.7%	0.9%	2.0%	1.0 - 5.0%
<b>Total</b>	<b>\$23,191.9</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	



*Teachers' Retirement System of the State of Kentucky  
Health Insurance Trust  
Quarterly Investment Performance  
Gross Returns  
For the Period Ended September 30, 2023*

FINAL

	<u>Market Value</u>	<u>Last Qtr</u>	<u>FYTD</u>	<u>1-Year</u>	<u>3-Year*</u>	<u>5-Year*</u>	<u>10-Year*</u>	<u>20-Year*</u>
<b>TOTAL PLAN</b>	\$ 2,471,676,801.69	-1.63	-1.63	13.09	7.04	6.81	7.01	-
<i>Policy Benchmark</i>		-2.29	-2.29	14.11	6.27	6.13	-	-
<b>Total Equity</b>	\$ 1,380,523,646.20	-3.54	-3.54	20.91	6.90	6.82		
<b>Domestic Equity</b>	\$ 934,892,659.47	-3.56	-3.56	20.90	-2.51	5.27	-	-
<i>S&amp;P 500 Index</i>		-3.27	-3.27	21.62	10.15	9.92	-	-
<i>Russell 3000</i>		-3.25	-3.25	20.46	9.38	9.14		
<b>International Equities</b>	\$ 445,630,986.73	-3.48	-3.48	20.45				-
<i>MSCI AC World ex USA IMI Index</i>		-3.39	-3.39	20.82				-
<b>Fixed Income</b>	\$ 174,562,661.47	-1.08	-1.08	2.68	-3.40	1.59	1.41	-
<i>Barclays Government Credit</i>		-3.00	-3.00	0.93	-5.32	0.41	1.31	-
<b>Real Estate</b>	\$ 156,290,589.42	-0.86	-0.86	-5.90	15.31	11.88	-	-
<b>Core Real Estate</b>	\$ 82,832,944.14	-1.40	-1.40	-5.18	12.82	10.25	-	-
<i>NCREIF ODCE (VW)</i>		-1.99	-1.99	-12.22	7.10	5.63	-	-
<b>Non-Core Real Estate</b>	\$ 73,457,645.28	-0.27	-0.27	-6.73	17.56	13.35	-	-
<i>NCREIF Property Index</i>		-1.37	-1.37	-8.39	6.04	5.26	-	-
<b>Private Equity</b>	\$ 225,739,841.59	2.21	2.21	5.47	23.19	15.53	16.02	-
<b>Mature Private Equity</b>	\$ 102,265,529.29	1.61	1.61	3.63	26.03	16.37	15.91	-
<i>S&amp;P 500 plus 3%</i>		-2.56	-2.56	25.27	13.45	13.21	15.27	-
<b>Private Equity &lt; 5 Years</b>	\$ 123,474,312.30	2.90	2.90	7.66	19.47	13.70	-	-
<b>Additional Categories:</b>	\$ 435,275,622.25	1.41	1.41	7.93	4.03	3.93	4.33	-
<i>B of A Merrill Lynch High Yield Master II</i>		0.53	0.53	10.19	1.82	2.78	4.16	-
<b>Cash (Unallocated)</b>	\$ 99,284,440.76	1.32	1.32	4.32	2.03	1.87	1.22	-
<i>90 Day T-Bill</i>		1.31	1.31	4.47	1.70	1.72	1.10	-

\*Returns are annualized for periods longer than one year

\*\* Prior to July 1, 2015, TRS did not benchmark overall fund performance. Effective July 1, 2015, the Board of Trustees approved a Policy Index that represents the returns of appropriate benchmarks for the various asset classes weighted by the mid point of the strategic range for the current fiscal year.

# Teachers' Retirement System of Kentucky

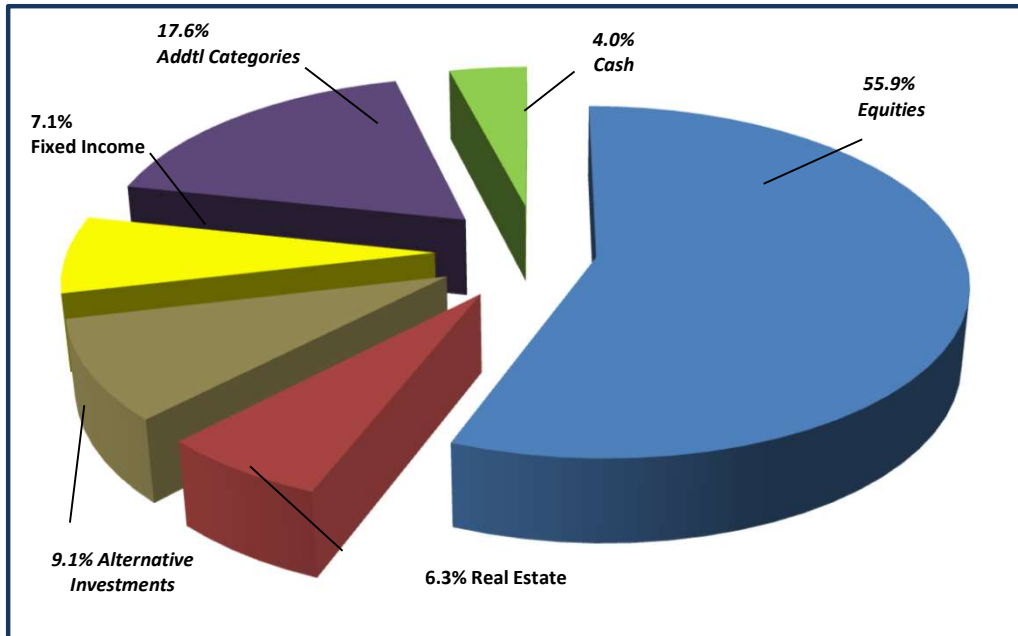
## Insurance Trust Fund

Quarterly Investment Update

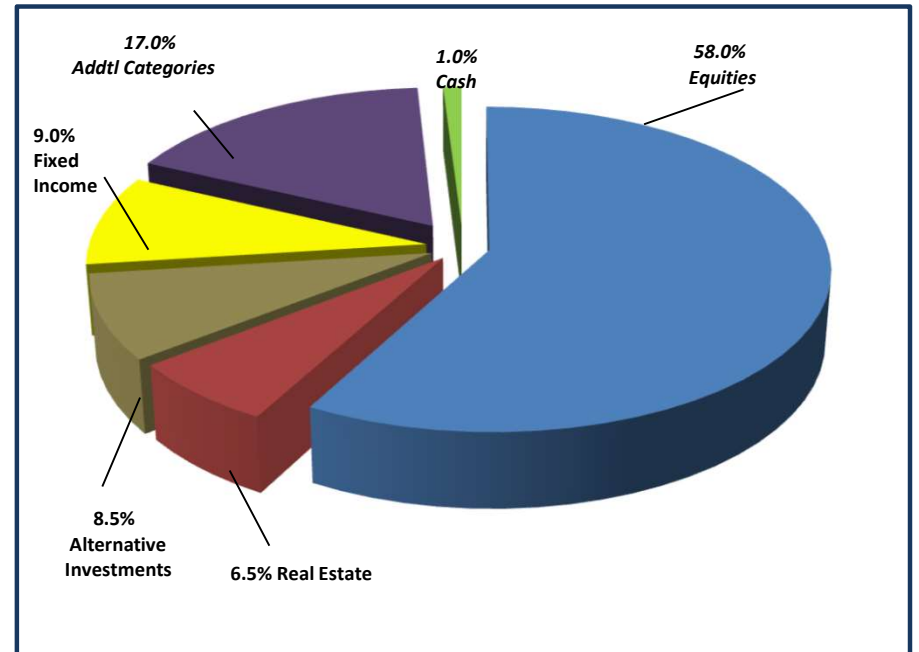
For the period ended September 30, 2023

<i>(\$ in thousands)</i>	<b>\$'s</b>	<b>9/30/2023 Actual %</b>	<b>6/30/2023 Actual %</b>	<b>Target %</b>	<b>Strategic Ranges</b>
Equities	\$1,380,523.7	55.9%	59.1%	58.0%	51.0 - 64.0%
Real Estate	\$156,290.6	6.3%	6.6%	6.5%	4.0 - 12.0%
Alternative Inv.	\$225,739.8	9.1%	9.2%	8.5%	5.0 - 12.0%
Fixed Income	\$174,562.7	7.1%	7.3%	9.0%	6.0 - 14.0%
Addtl Categories	\$435,275.6	17.6%	17.2%	17.0%	14.0 - 25.0%
Cash	\$99,284.4	4.0%	0.6%	1.0%	0.0 - 5.0%
<b>Total</b>	<b><u>\$2,471,676.8</u></b>	<b><u>100.0%</u></b>	<b><u>100.0%</u></b>	<b><u>100.0%</u></b>	

**ACTUAL %**



**TARGET %**



TOTAL BV INVESTED AT 06/30/23 \$ 18,622,335,422.74

July Activity

Purchases	555,362,308.33	
Disposals	(403,768,989.32)	
Paydowns	(1,805,144.77)	
Redemptions	(1,793,101.70)	
Short-Term Pool Net	(88,850,543.29)	59,144,529.25

August Activity

Purchases	254,263,889.73	
Disposals	(709,530,723.62)	
Paydowns	(1,048,808.33)	
Redemptions	(69,473,868.46)	
Short-Term Pool Net	577,860,508.63	52,070,997.95

September Activity

Purchases	770,817,373.44	
Disposals	(297,075,354.44)	
Paydowns	(2,510,298.42)	
Redemptions	(56,248,382.42)	
Short-Term Pool Net	(474,858,331.93)	(59,874,993.77)

TOTAL BV INVESTED AT 9/30/23 \$ 18,673,675,956.17

\* TRS recognizes investment transactions on the date they occur. Transaction settlements, generally, occur days following transactions. The interim period between transaction date and settlement date represents a "pending period". At the time this statement was produced, (\$20,677,041.59) in net transactions had occurred but had not settled. The statement does not include either expected cash receipts or disbursements associated with these pending trades. Upon settlement of these pending transactions, the net effect would be as follows:

Total Short Term	\$ 583,771,483	
- Pending Payable	20,677,042	
Net	\$ 563,094,441	



**INVESTMENT ACTIVITY**  
**July 1, 2023 -- September 30, 2023**

**Total Book Value Invested @ 7/1/23** \$ 18,622,335,422.74

Purchases:

329	Cash Equivalents	\$	1,534,422,861.90	
94	Fixed Income Securities		249,593,043.63	
2	Principal Paydowns		318,540.09	
0	Additional Redemptions / Maturities		-	
1675	Equity Securities		900,135,969.13	
37	Real Estate		32,495,332.98	
101	Alternative Investments		114,262,473.66	
213	Additional Categories		283,956,752.10	
<hr/>				
2451	Total Purchases	\$		3,115,184,973.49

Disposals:

320	Cash Equivalents	\$	1,517,343,779.32	
277	Fixed Income Securities		228,351,139.52	
277	Principal Paydowns		5,682,791.61	
33	Redemptions / Maturities		126,025,182.38	
1021	Equity Securities		895,896,866.57	
51	Real Estate		27,333,390.55	
188	Alternative Investments		88,487,245.10	
142	Additional Categories		173,233,874.81	
0	Additional Principal Paydowns		-	
3	Additional Redemptions / Maturities		1,490,170.20	
<hr/>				
2312	Total Disposals	\$		3,063,844,440.06

**Total Book Value Invested @ 9/30/23** \$ 18,673,675,956.17

**Total Par Value Invested @ 9/30/23** \$ 18,319,784,388.82

**Total Market Value Invested @ 9/30/23** \$ 23,191,915,198.12

\* TRS recognizes investment transactions on the date they occur. Transaction settlements, generally, occur days following transactions. The interim period between transaction date and settlement date represents a "pending period". At the time this statement was produced, (\$20,677,041.59) in net transactions had occurred but had not settled. The statement does not include either expected cash receipts or disbursements associated with these pending trades. Upon settlement of these pending transactions, the net effect would be as follows:

Total Short Term	\$	583,771,483
- Pending Payable		20,677,042
Net	<u>\$</u>	<u>563,094,441</u>

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

FROM: Gary L. Harbin, CPA  
Executive Secretary

DATE: December 18, 2023

SUBJECT: Report of the Governance and Audit Committee

The Governance and Audit Committee had a special meeting on November 14, and the following is a summary of the committee's actions.

1. Independent Actuary's Valuations: The committee unanimously accepted the actuarial valuations as of June 30, 2023, for the retirement annuity, health and life insurance trusts after hearing a presentation by Cavanaugh Macdonald Consulting.
2. External Audit Report: The committee unanimously accepted the audit of the financial statements for the years ended June 30, 2023, and 2022, by Blue and Co. The auditor also reported concerning internal controls and compliance at TRS.
3. Request for Proposals Discussion – Death Match Audit: The committee unanimously approved contracting with Lexis Nexis for death match audit services as recommended by the RFP review committee.
4. Procurement Policy Discussion: The committee unanimously approved recommended changes to the procurement policy for small purchases adjusting the amounts to reflect inflation and common experience.
5. Funding Policy Discussion: The committee unanimously approved changes to the board funding policy adding a schedule to the Health Insurance Trust annual valuation showing what a loss of subsidies and rebates on prescription medication would mean to the funded status.

Recommendation: The executive secretary recommends that the board accept and ratify the Report of the Governance and Audit Committee.

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

FROM: Gary L. Harbin, CPA  
Executive Secretary

DATE: December 18, 2023

SUBJECT: Report of the Insurance Committee

The Insurance Committee will meet on Monday, December 18, prior to the quarterly board meeting to consider a contract extension for a medical benefit consultant.

Recommendation: This report is for information, and any actions by the committee will be reported to the board with a request for those actions to be accepted and ratified.

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

FROM: Gary L. Harbin, CPA  
Executive Secretary

DATE: December 18, 2023

SUBJECT: Report of the Scholarship Committee

The Scholarship Committee will meet on Monday, December 18, prior to the quarterly board meeting to consider scholarship awards for the 2024-2025 school year.

Background: Ms. Junita Losey was a retired teacher from Northern Kentucky who taught for 30 years in the Campbell County school district. Ms. Losey, who died in 1997, left more than \$400,000 to TRS in her will in appreciation of the benefits she received from TRS during her retired years. The board used these funds to establish a scholarship fund in Ms. Losey's name.

In the past, the board awarded a \$2,000 scholarship to each of the eight public universities in Kentucky (for a total of \$16,000 per year). The universities select the recipient who is to be a student who:

1. Is a graduate of a Kentucky public high school;
2. Is a junior or senior in college majoring in education;
3. Is a full-time student;
4. Maintains a GPA of 2.8 on a 4.0 scale

Additionally, the board also has awarded a \$2,000 scholarship for tuition, books and fees to a Campbell County High School senior who intends to major in education in a Kentucky public university. This student must have an average GPA in high school of 2.8 on a 4.0 scale.

The committee also will receive a report from investment staff concerning funds available for scholarship awards.

Recommendation: This report is for information, and any actions by the committee will be reported to the board with a request for those actions to be accepted and ratified.

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

FROM: Gary L. Harbin, CPA  
Executive Secretary

DATE: December 18, 2023

SUBJECT: Report of the Personnel Committee

The Personnel Committee met November 20, to review the performance of the executive secretary. The committee unanimously voted to recommend to the board to amend the contract with the executive secretary replacing the current four-year term with a four-year term from January 1, 2024, through December 31, 2027. Additionally, the executive secretary will receive the same salary increase available to TRS employees.

Recommendation: The Personnel Committee recommends that the board approve and ratify the report of the Personnel Committee.

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

FROM: Gary L. Harbin, CPA  
Executive Secretary

DATE: December 18, 2023

SUBJECT: Executive Secretary's Observations and Comments

1. 2023 Award for Funding and Administration: The Public Pension Coordinating Council awarded the Certificate of Achievement to the Teachers' Retirement System (TRS) for 2023 for implementing and maintaining high professional standards for plan funding and administering the affairs of the system. The award is based on compliance with principles judged to underlie exemplary retirement system achievements in the areas of funding, investment, disclosure, actuarial valuation, financial reporting and benefits. These principles are widely acknowledged to be marks of excellence for retirement systems and represent the highest standards of excellence in the public pension industry.

In addition to the certificate of achievement in administration, TRS again was awarded the certificate of achievement for funding. A renewed emphasis on funding of the Retirement Annuity Trust by the legislature demonstrated in the current and recent budgets qualified the plan for the funding award again this year; TRS did not receive this certificate during the period of the state's underfunding the trust.

The Public Pension Coordinating Council is a confederation of the National Council on Teacher Retirement, the National Association of State Retirement System Administrators and the National Conference on Public Employee Retirement Systems.

2. Certificate of Achievement for Excellence in Financial Reporting: TRS, for the 35<sup>th</sup> consecutive year, has received an Award for Financial Reporting Achievement for its Annual Comprehensive Financial Report. This award, presented by the Government Finance Officers Association of the United States and Canada, is given to those governmental units and retirement systems that achieve the highest standards in government accounting and financial reporting. This certificate highlights the standards used in providing transparent information that is comparable to that information presented by other public plans.

3. Executive Secretary's Meetings: The executive secretary has had meetings with several groups recently and will report to the board concerning the following:

September 21	Meeting with Todd Asset Management
September 19	Meeting with Baptist Health Services
November 1-3	Public Sector Health Care Roundtable annual meeting
November 2	Board meeting with Institute for Public Health Care Policy
November 9	Meeting with Kentucky Education Association-Retired

November 13	Meeting with Todd Asset Management
November 15	Meeting with Fort Washington Investment Advisors
December 5	Meeting with Know Your Rx (KYRx) representatives
December 8	KYRx board meeting

4. 2024 Board Meeting Dates: Dates for the quarterly board meetings for 2024 are listed below. The meetings will begin at 12:30 p.m. ET, unless otherwise announced.

Monday, March 18

Monday, June 17

Monday, September 16

Monday, December 16