

TEACHERS' RETIREMENT SYSTEM

of the State of Kentucky

BOARD OF TRUSTEES

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Education Commissioner

GARY L. HARBIN, CPA

Executive Secretary

Regular Quarterly Meeting of the

TRS Board of Trustees

AGENDA

September 20, 2021, 12:30 p.m. ET

Board Called to Order

Roll Call

- 1. Reports for Consent
 - 1.1. Consideration/Approval of Minutes
 - 1.1.1. Quarterly Meeting of the Board of Trustees, June 21, 2021
 - 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 Insurance Committee
- 4. Report of the Governance and Audit Committee
- 5. Report of the Legislative Committee
- 6. Executive Secretary's Observations and Comments

General Discussion

Adjournment

The meeting will be conducted by live video teleconference. Information on accessing the meeting will be provided on TRS's website at:

https://trs.ky.gov/administration

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

FROM: Gary L. Harbin, CPA

Executive Secretary

DATE: September 20, 2021

RE: Reports for Consent

1.1. Consideration/Approval of Minutes

1.1.1. Quarterly Meeting of the Board of Trustees held June 21, 2021

1.2. Applications for Retirement and Annuity

The list of members who retired June, July and August 2021 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 1,229 retirees with monthly payments totaling \$4,150,489.77. During the same period last year, 1,119 retirements resulted in monthly payments totaling \$3,790,331.09.

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 April 1, 2021, through June 30, 2021, is included in the board materials. During the period, 14 survivor benefits commenced with a total monthly payment of \$2,400.

Recommendation: The board is requested to approve 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 period April 1, 2021, through June 30, 2021, is included in the board materials. Eight payments to the estates or beneficiaries of active teachers and 269 payments to the estates or beneficiaries of retired teachers combined for total payments of \$1,361,000. During the same quarter in 2020, 253 payments amounted to \$1,247,000.

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 June 30, 2021, also is attached. During the quarter, 352 refunds totaled \$4,781,134.17. The refunds are for the following categories:

Regular withdrawals	326	\$3,745,381.41
Deaths	<u> 26</u>	\$1,035,752.76
Totals	352	\$4,781,134.17

During the same quarter in 2020, 296 refunds totaled \$3,641,860.70.

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

1.6. Interim Financial Statements

Attached are the Interim Financial Statements for the quarter ended June 30, 2021.

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 2021

	_		2021		C D 1 1000
	June	July	August	Total	Same Period 2020
Handicapped	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Child	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Disability	<i>4</i>	11	11	26	25
Retirement	\$10,150.27	\$30,260.24	\$28,763.56	\$69,174.07	\$64,788.50
Service	<i>222</i>	627	350	1,199	1,091
Retirement	\$755,689.72	\$2,117,688.47	\$1,184,228.37	\$4,057,606.56	\$3,716,411.49
Beneficiary of Member Eligible to Retire	<i>0</i> \$0.00	<i>3</i> \$19,088.30	<i>1</i> \$4,620.84	<i>4</i> \$23,709.14	<i>3</i> \$9,131.10
TOTALS	226	<i>641</i>	362	1,229	1,119
	\$765,839.99	\$2,167,037.01	\$1,217,612.77	\$4,150,489.77	\$3,790,331.09

Reports for Consent Member Account Refunds For the period April 2021 - June 2021

Active Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
April	106	344,779.40	85,807.74	538,718.93	969,306.07
May	103	409,817.44	101,881.06	590,769.99	1,102,468.49
June	117	774,875.48	193,360.17	705,371.20	1,673,606.85
Total	326				3,745,381.41

Deceased Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
April	10	323,526.04	80,724.33	148,100.35	552,350.72
May	7	245,095.99	27,858.85	0.00	272,954.84
June	9	168,500.99	41,009.91	936.30	210,447.20
Total	26				1,035,752.76

Total Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
April	116	668,305.44	166,532.07	686,819.28	1,521,656.79
May	110	654,913.43	129,739.91	590,769.99	1,375,423.33
June	126	943,376.47	234,370.08	706,307.50	1,884,054.05
Total	352				4,781,134.17

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY



INTERIM FINANCIAL STATEMENTS

QUARTER ENDED JUNE 30, 2021 (FAIR VALUE – UNADJUSTED & UNAUDITED)

Statements of Plan Net Assets as of June 30, 2021 and 2020

(Fair Value - Unadjusted & Unaudited)

		ement y Trust	Health Insurance Trust		Life Insurance Trust		Other Funds		TOTAL	
	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020
ASSETS										
Cash	\$ 177,163,375	\$ 145,187,806	\$ 68,767,282	\$ 59,313,496	\$ 274,743		\$ 253,916	\$ 32,119	\$ 246,459,316	\$ 204,533,421
Receivables										
Contributions	49,630,590	53,939,286	10,344,680	25,205,437	47,267	13,058			60,022,537	79,157,781
State of Kentucky	45.254.006	42 545 921	2 441 060	2.042.200	81,540	178,131	2 (4 5	2 (02	81,540	178,131
Investment Income	45,254,996	42,747,821	3,441,069	2,942,288	263,725	273,122	2,645	2,682	48,962,435	45,965,913
Investment Sales Receivable	58,963,007	14,904,196	2,949,484	1,494,412	13,985	13,018			61,926,476	16,411,626
Installment Account Receivable	82,355	88,387	25.045.454	24 442 404					82,355	88,387
Other Receivables	2,862	22,170	37,947,151	31,412,496					37,950,013	31,434,666
Due from Other Funds	3,848,217	2,084,771							3,848,217	2,084,771
Total Receivables	157,782,027	113,786,631	54,682,384	61,054,633	406,517	477,329	2,645	2,682	212,873,573	175,321,275
Investments at Market Value										
Short Term Investments	1,065,314,674	757,664,315	157,506,899	26,908,534	9,405,976	12,219,575	349,252	354,977	1,232,576,801	797,147,401
Bonds and Mortgages	3,627,641,860	2,942,102,333	155,171,801	128,746,941	20,043,254	14,143,524	279,516	315,524	3,803,136,431	3,085,308,322
Stocks	16,068,066,132	12,593,762,661	1,274,610,864	914,010,573	68,281,332	55,860,313	482,531	348,641	17,411,440,859	13,563,982,188
Alternative Investments	1,758,133,237	1,465,067,724	170,660,050	113,773,957	1,420,802	361,320			1,930,214,089	1,579,203,001
Real Estate	1,405,889,581	1,227,834,915	111,459,521	82,393,040	5,181,114	2,399,699			1,522,530,216	1,312,627,654
Additional Categories	1,803,453,180	1,549,337,817	349,991,170	262,798,450	2,549,353	2,034,758			2,155,993,703	1,814,171,025
Total Investments	25,728,498,664	20,535,769,765	2,219,400,305	1,528,631,495	106,881,831	87,019,189	1,111,299	1,019,142	28,055,892,099	22,152,439,591
Capital Assets	10,255,925	12,072,094							10,255,925	12,072,094
(net of accumulated depreciation)										
Total Assets	26,073,699,991	20,806,816,296	2,342,849,971	1,648,999,624	107,563,091	87,496,518	1,367,860	1,053,943	28,525,480,913	22,544,366,381
LIABILITIES										
Liabilities										
Accrued Expenses and Other Liabilities	14,815,496	8,559,121	7,472,716	9,039,424		52,641			22,288,212	17,651,186
State of Kentucky			22,741,764	14,762,969					22,741,764	14,762,969
Contributions Not Posted	_	_		291,343						291,343
Investment Purchases Payable	77,369,441	64,834,604	6,719,338	3,323,593	13,539	12,321	_	_	84,102,318	68,170,518
Investment Fees Payable	18,620,079	16,422,249	1,643,815	2,859,798	52,158	27,685	_	_	20,316,052	19,309,732
Due to Other Funds	-	-	3,775,247	2,047,238	70,478	35,980	2,492	1,554	3,848,217	2,084,772
Total Liabilities	110,805,016	89,815,974	42,352,880	32,324,365	136,175	128,627	2,492	1,554	153,296,563	122,270,520
NET ASSETS HELD IN TRUST										
FOR PENSION BENEFITS	\$ 25,962,894,975 ========	\$ 20,717,000,322 ======	\$ 2,300,497,091 ======	\$ 1,616,675,259 =======	\$ 107,426,916 ======	\$ 87,367,891 ======	\$ 1,365,368 ======	\$ 1,052,389 ======	\$ 28,372,184,350 ========	\$ 22,422,095,861 =======

Statements of Changes in Plan Net Assets For the Twelve Months Ended June 30, 2021 and 2020

(Fair Value - Unadjusted & Unaudited)

		ement y Trust	He: Insuran	alth ce Trust		ife ce Trust		her nds	TO	ΓAL
	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020	FY 2021	FY 2020
ADDITIONS	11 -0-1	11 2020	11	11 = 0= 0	11 2021	11 2020	1 1 2021	11 2020	11 = -	1 1 2020
Contributions										
Employer- State Paid	\$ 1,060,257,414	\$ 1,048,192,668	\$ 78,216,742	\$ 77,191,060	\$ 1,852,447	\$ 1,543,413	\$ -	\$ -	\$ 1,140,326,603	\$ 1,126,927,141
Employer- LSD, Other	113,836,023	86,088,427	106,662,998	107,434,413	285,928	252,976	365,866	-	221,150,815	193,775,816
Member- Active	327,833,177	324,664,055	127,753,430	133,470,962					455,586,607	458,135,017
Member- Retired			59,871,663	59,338,283					59,871,663	59,338,283
Recovery Income			120,747,316	100,375,748					120,747,316	100,375,748
Total Contribution	1,501,926,614	1,458,945,150	493,252,149	477,810,466	2,138,375	1,796,389	365,866	-	1,997,683,004	1,938,552,005
Investment Income/(Loss)										
Net Appreciation/(Depreciation) in										
Fair Value of Investments	5,759,598,152	723,233,155	499,516,141	19,256,856	23,273,275	3,954,293	97,882	60,956	6,282,485,450	746,505,260
Interest	96,251,897	171,256,317	737,237	11,545,773	548,043	690,620	9,547	15,335	97,546,724	183,508,045
Dividends	208,073,365	234,318,496	9,586,461	7,331,916	583,808	719,334	6,489	6,758	218,250,123	242,376,504
Rental Income, Net	21,821,971	27,049,513							21,821,971	27,049,513
Securities Lending, Net	2,751,699	2,228,729			52,028	37,974	690	440	2,804,417	2,267,143
Gross Investment Income	6,088,497,084	1,158,086,210	509,839,839	38,134,545	24,457,154	5,402,221	114,608	83,489	6,622,908,685	1,201,706,465
Less Investment Expense	(71,312,772)	(64,062,834)	(6,639,090)	(5,659,596)	(382,006)	(236,018)	-	-	(78,333,868)	(69,958,448)
Net Investment Income	6,017,184,312	1,094,023,376	503,200,749	32,474,949	24,075,148	5,166,203	114,608	83,489	6,544,574,817	1,131,748,017
Total Additions	7,519,110,926	2,552,968,526	996,452,898	510,285,415	26,213,523	6,962,592	480,474	83,489	8,542,257,821	3,070,300,022
DEDUCTIONS										
Benefits	2,235,240,616	2,167,239,241			6,120,000	5,317,000	166,555	229,574	2,241,527,171	2,172,785,815
Refunds of Contributions	25,373,818	28,472,217			-,,	-,,	,		25,373,818	28,472,217
Under 65 Insurance Expenses	- / /	-, ,	106,822,555	109,708,027					106,822,555	109,708,027
Over 65 Insurance Expenses			204,080,504	195,874,947					204,080,504	195,874,947
Administrative Expense	12,601,841	12,166,651	1,728,008	2,047,238	34,498	35,980	939	1,554	14,365,286	14,251,423
Total Deductions	2,273,216,275	2,207,878,109	312,631,067	307,630,212	6,154,498	5,352,980	167,494	231,128	2,592,169,334	2,521,092,429
Net Increase (Decrease)	5,245,894,651	345,090,417	683,821,831	202,655,203	20,059,025	1,609,612	312,980	(147,639)	5,950,088,487	549,207,593
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS										
Beginning of year	20,717,000,324	20,371,909,905	1,616,675,260	1,414,020,056	87,367,891	85,758,279	1,052,388	1,200,028	22,422,095,863	21,872,888,268
Ending of period	\$ 25,962,894,975 =======	\$ 20,717,000,322 =======	\$ 2,300,497,091	\$ 1,616,675,259	\$ 107,426,916 ======	\$ 87,367,891 =======	\$ 1,365,368 ======	\$ 1,052,389 =======	\$ 28,372,184,350 ======	\$ 22,422,095,861 =======

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

FROM: Gary L. Harbin, CPA

Executive Secretary

DATE: September 20, 2021

RE: Report of the Investment Committee

- 1. <u>Investment Committee Meeting and Actions</u>: New investments presented at the August 26, 2021, Investment Committee meeting were as follows: a commitment of up to \$100 million from the Retirement Annuity Trust, up to \$10 million from the Health Insurance Trust and up to \$5 million from the Life Insurance Trust to Baillie Gifford Private Companies II; a commitment of up to \$50 million from the Retirement Annuity Trust, up to \$10 million from the Health Insurance Trust and up to \$5 million from the Life Insurance Trust to Silver Lake Alpine II; and a commitment of up to \$25 million from the Retirement Annuity Trust and up to \$5 million from the TRS Health Insurance Trust to the Apax Credit Fund. The committee ratified the contract with Lord Abbett for fiscal year 2022. Outside managers Wellington Asset Management and Fort Washington presented on their respective portfolios.
- 2. <u>Purchases and Disposals</u>: The Report of the Investment Committee for the quarter ended June 30, 2021, is presented for review and approval. During this quarter, 1,936 purchases amounted to \$2,362,411,969.40 and 2,070 disposals amounted to \$2,128,054,196.44. The disposals consisted of 1,716 sales, 311 principal payments and 43 redemptions. While each of these transactions is initiated by TRS investment staff, 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 \$17,686,617,417.16 and a market value of \$25,728,805,148.02.
- 3. Staff's Comments on Economic and Market Conditions: In the second calendar quarter of 2021, markets were focused on reopening efforts, an accelerating global vaccine rollout, continued accommodative global central bank policy and expectations for further fiscal expansion in the United States. The supportive policy backdrop led to a strong quarter for risk assets. Global equities were paced by the United States, as substantial upward earnings revisions during the quarter helped the S&P 500 to an 8.5% gain. Broad U.S. economic conditions remained robust as the recovery took hold. Nonfarm payroll growth averaged 567,000 jobs per month during the quarter. Payrolls increased by 850,000 alone in June, with the leisure and hospitality sectors accounting for an outsized portion of gains as states relaxed pandemic related restrictions. Supply constraints, amid heightened demand for goods and the rapid pace of economic growth, led to a series of above-consensus price level changes during the quarter. June's Consumer Price Index (CPI) release indicated year-over-year price level changes of 5.4%, with core CPI increasing at 4.5%. With rate hikes largely off the table in the near-term, investor focus remained on the Federal Reserve tapering its \$120 billion monthly asset purchase program. Consensus is building around the December meeting for an announcement, assuming the pace of economic recovery continues as expected. Overall, the global economic recovery continues to advance, with the International Monetary Fund forecasting a global gross domestic product growth rate of 6.0% and 4.4% in 2021 and 2022, respectively.

U.S. equity markets built on the solid start to 2021 with strong performance in the second calendar quarter. Sentiment was driven by continued monetary and fiscal stimulus, along with increased vaccination rates that led to economic reopening efforts across the country. Large- and mid-cap growth stocks outperformed value in the quarter; however, value stocks continued to lead growth stocks in the small-cap space. With the exception of utilities, sectors posted positive returns in the quarter. Real estate outperformed all other sectors as housing prices continued to rise. Growth-oriented technology stocks bounced back from a poor first quarter as earnings were stronger than expected. Active management generally struggled in the quarter, as the majority of large- and mid-cap managers failed to keep pace with their respective benchmarks. Developed international markets delivered positive returns in the second quarter as growth outperformed value — a reversal of the first quarter value rally.

The Bloomberg Barclays U.S. Aggregate returned 1.8% in the second quarter, remaining down 1.6% for the calendar year. Treasury yields fell despite an easing of pandemic-related restrictions, which supported economic growth and rising inflationary pressures. The 10-year Treasury yield declined to 1.45% from 1.74% at the end of the first quarter. The Bloomberg U.S. High Yield returned 2.7% in the quarter.

Core private real estate generated a positive 3.9% return in the quarter, as reported by the NFI-ODCE, with the total return comprising of 1% income and 2.9% price appreciation. Transaction volume has started to increase in the United States with cap rates continuing to trend downward. Real estate continued to recover from the impact of the pandemic, bringing a collective sense that a particularly challenging period for real estate fundamentals is in the rearview mirror. Remaining concerns include the pace of workers returning to the office, additional stimulus dollars and the potential impact of higher inflation. Historically, real estate investments have performed well in inflationary environments as rents are regularly reset to market rates.

4. <u>Performance</u>: Investment performance was strong for the quarter ending June 30, 2021. The Retirement Annuity Trust Fund's portfolio appreciated 5.61% and 29.94% for quarter and 12-month period respectively, in line with the Policy Index, which increased 5.87% and 28.65%. TRS's domestic equities increased 7.78%, underperforming the S&P 1500 that increased 8.14% for the quarter. TRS's international stocks returned 4.52% and trailed the MSCI All Country ex U.S. index, which returned of 5.64% for the quarter. Alternatives and additional categories made positive contributions in the quarter with private equity up 11.99% and additional categories returning 3.4%. TRS's fixed income returned 2.78%, outperforming the Bloomberg Barclays Gov/Credit Bond index that returned 2.42%. Real estate was up 2.51%.

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 June 30, 2021

FINAL

FINAL								
	Market Value	Last Qtr	FYTD	1-Year	3-Year*	5-Year*	10-Year*	20-Year*
TOTAL PLAN	\$ 25,728,805,148.02	5.61	29.94	29.94	13.34	13.23	10.32	7.53
Policy Benchmark		5.87	28.65	28.65	12.94	12.42	9.93	-
Total Equity	\$ 16,165,741,254.80	6.66	44.65	44.65	16.90	17.32	12.84	8.08
Domestic Equity	\$ 10,738,569,040.82	7.78	47.70	47.70	18.81	18.45	14.79	9.01
S&P 1500 Index		8.14	42.12	42.12	18.12	17.38	14.63	8.61
All-Cap Equities	\$ 556,689,904.73	7.33	51.58	51.58	21.26	-	-	-
Russell 3000 Index		8.24	44.16	44.16	18.73	-	-	-
Large-Cap Equities	\$ 8,743,869,052.77	8.52	46.78	46.78	19.43	18.78	14.95	-
S&P 500 Index		8.55	40.79	40.79	18.67	17.65	14.84	-
Mid-Cap Equities	\$ 873,084,743.86	3.46	47.68	47.68	14.99	16.50	13.71	-
S&P 400 Index		3.64	53.24	53.24	13.17	14.29	12.40	-
Small-Cap Equities	\$ 564,925,339.46	3.93	60.06	60.06	12.99	15.88	13.65	-
S&P 600 Index		4.51	67.40	67.40	12.20	15.82	13.49	-
International Equity	\$ 5,427,172,213.98	4.52	38.86	38.86	13.38	15.24	8.22	-
MSCI AC World Ex US		5.64	36.29	36.29	9.88	11.59	5.93	-
Fixed Income	\$ 3,934,716,083.66	2.78	-0.13	-0.13	6.21	3.72	4.25	5.34
Bloomberg Barclays Govt/Credit Index		2.42	-0.39	-0.39	5.95	3.31	3.71	4.73
Real Estate	\$ 1,405,889,580.45	2.51	6.74	6.74	6.67	8.34	8.65	9.02
In House Real Estate Equity	\$ 402,420,071.66	1.39	3.89	3.89	4.87	7.70	7.89	8.33
CPI plus 2%		2.84	7.43	7.43	4.62	4.49	3.92	4.13
Core Real Estate	\$ 622,821,679.50	2.31	4.42	4.42	6.49	7.09	10.15	-
NCREIF ODCE (VW) Index		3.93	8.02	8.02	5.52	6.57	9.60	-
Non-Core Real Estate	\$ 380,647,829.29	4.04	13.70	13.70	9.18	10.67	14.76	-
NCREIF Property Index		3.59	7.37	7.37	5.50	6.13	8.79	-
Private Equity	\$ 1,549,761,484.65	11.99	38.66	38.66	15.87	15.98	13.28	-
Mature Private Equity	\$ 741,219,170.69	12.49	37.09	37.09	13.66	13.19	-	-
S&P 500 Index plus 3%		9.35	45.02	45.02	22.23	21.17	-	-
Private Equity < 5 Years	\$ 808,542,313.96	11.29	43.90	43.90	18.46	18.88	-	-
Timberland	\$ 208,371,752.67	0.78	-5.57	-5.57	0.53	0.37	2.74	-
NCREIF Timberland Index		1.70	3.10	3.10	2.12	2.65	4.66	-
Additional Categories	\$ 1,840,153,888.47	3.40	16.35	16.35	6.76	6.92	6.14	-
B of A Merrill Lynch U.S. High Yield Master II Index	c .	2.77	15.62	15.62	7.15	7.30	6.50	-
Cash (Unallocated)	\$ 624,171,103.32	0.01	0.03	0.03	1.19	1.11	0.62	1.48
90 Day T-Bill		0.00	0.09	0.09	1.34	1.16	0.61	1.31

Total Trust Gross Return for 30-year period*

8.59

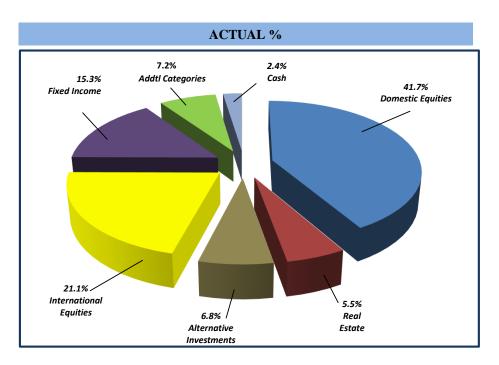
^{*}Returns are annualized for periods longer than one year

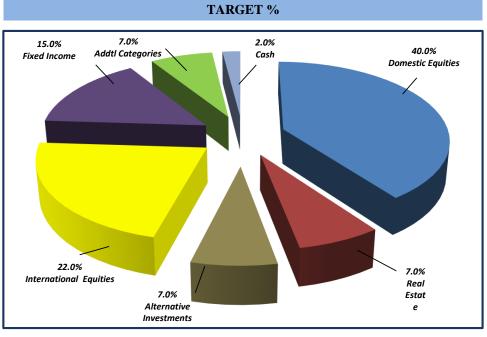
^{**} Prior to July 1, 2008, TRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index that represents the returns of appropriate benchmarks for the various asset classes weighted by the mid-point of the strategic range for the current fiscal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

Teachers' Retirement System of Kentucky

Quarterly Investment Update For the period ended June 30, 2021

(\$ in millions)	\$'s	6/30/2021 Actual %	3/31/2021 Actual %	Target %	Strategic Ranges
Domestic Equities	\$10,738.6	41.7%	40.7%	40.0%	34.0 - 48.0%
Real Estate	1,405.9	5.5%	5.8%	7.0%	4.0 - 10.0%
Alternative Inv.	1,758.1	6.8%	6.1%	7.0%	4.0 - 10.0%
International Equities	5,427.2	21.1%	21.2%	22.0%	18.0 - 25.0%
Fixed Income	3,934.7	15.3%	15.8%	15.0%	8.0 - 22.0%
Addtl Categories	1,840.1	7.2%	7.3%	7.0%	4.0 - 15.0%
Cash	624.2	2.4%	3.1%	2.0%	1.0 - 5.0%
Total	\$25,728.8	100.0%	100.0%	100.0%	





Teachers' Retirement System of the State of Kentucky Health Insurance Trust Quarterly Investment Performance Gross Returns For the Period Ended June 30, 2021

FINAL

	Market Value	Last Qtr	FYTD	1-Year	3-Year*	5-Year*	10-Year*	20-Year*
TOTAL PLAN	\$2,219,400,304.83	6.40	31.53	31.53	12.92	12.48	-	
Policy Benchmark	, , , , , , , , , , , , , , , , , , , ,	6.18	29.96	29.96	12.29	12.10	-	
Total Equity	\$1,275,845,514.39	7.89	44.40	44.40	16.03			
Domestic Equity	\$ 171,521,014.24	12.34	67.63	67.63	27.30	-	-	
S&P 500 Index		8.55	40.79	40.79	18.67	-	-	
Russell 3000		8.24	44.16	44.16	18.73			
Global Equities	\$1,104,324,500.15	7.23	41.49	41.49	14.61	14.92	10.32	
MSCI AC World IMI (Net)		7.18	40.94	40.94	14.24	14.55	9.90	
Fixed Income	\$ 192,012,876.07	2.00	-0.32	-0.32	5.91	3.32	2.45	
Barclays Government Credit		2.42	-0.39	-0.39	5.95	3.31	3.71	
Real Estate:	\$ 111,459,520.93	3.57	11.88	11.88	9.40	10.06	-	
Core Real Estate	\$ 55,419,069.96	2.57	6.76	6.76	7.71	7.61	-	
NCREIF ODCE (VW)		3.93	8.02	8.02	5.52	6.57	-	
Non-Core Real Estate	\$ 56,040,450.97	4.55	16.37	16.37	10.86	11.68	-	
NCREIF Property Index		3.59	7.37	7.37	5.50	6.13	-	
Private Equity	\$ 170,660,049.68	14.24	42.60	42.60	16.22	17.85	-	
Mature Private Equity	\$ 51,786,723.90	16.15	37.07	37.07	17.05	15.78	-	
S&P 500 plus 3%		9.35	45.02	45.02	22.23	21.17	-	
Private Equity < 5 Years	\$ 118,873,325.78	13.14	48.85	48.85	17.26	18.73	-	
Additional Categories:	\$ 359,849,493.55	3.23	16.73	16.73	6.92	7.14	6.10	
B of A Merrill Lynch High Yield Master II		2.77	15.62	15.62	7.15	7.30	6.50	
Cash (Unallocated)	\$ 109,572,850.21	0.01	0.04	0.04	1.28	1.15	0.64	
90 Day T-Bill	. , , , , , , , , , , , , , , , , , , ,	0.00	0.09	0.09	1.34	1.16	0.61	

^{*}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.

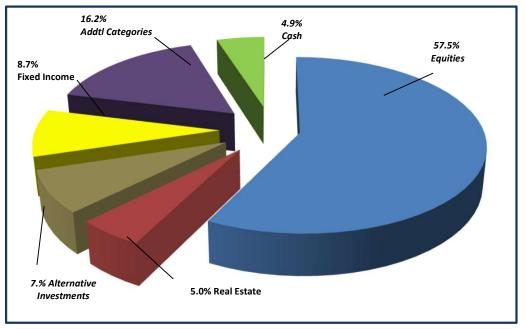
Teachers' Retirement System of Kentucky

Insurance Trust Fund

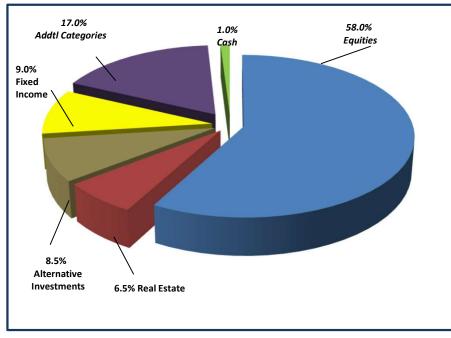
Quarterly Investment Update For the period ended June 30, 2021

(\$ in thousands)	\$'s	6/30/2021 Actual %	3/31/2021 Actual %	Target %	Strategic Ranges
Equities	\$1,275,845.5	57.5%	57.8%	58.0%	51.0 - 64.0%
Real Estate	\$111,459.5	5.0%	5.1%	6.5%	4.0 - 12.0%
Alternative Inv.	\$170,660.0	7.7%	7.1%	8.5%	5.0 - 12.0%
Fixed Income	\$192,012.9	8.7%	9.2%	9.0%	6.0 - 12.0%
Addtl Categories	\$359,849.5	16.2%	17.5%	17.0%	14.0 - 21.0%
Cash	\$109,572.9	4.9%	3.3%	1.0%	0.0 - 4.0%
Total	\$2,219,400.3	100.0%	100.0%	100.0%	

ACTUAL %



TARGET %



TOTAL BV INVESTED AT 06/30/21

17,686,617,417.16

April	Activity

Purchases	705,941,060.26	
Disposals	(516,051,736.34)	
Paydowns	(7,257,648.33)	
Redemptions	(16,550,446.26)	
Short-Term Pool Net	74,774,923.32	
		240,856,152.65
Purchases	476,837,598.52	
Disposals	(345,704,992.25)	
Paydowns	(2,406,379.24)	
Redemptions	(11,270,196.97)	
Short-Term Pool Net	(134,178,071.92)	
		(16,722,041.86)
Purchases	455,823,425.22	
Disposals	(341,284,847.17)	
Paydowns	(2,967,306.24)	
•	(22,418,258.90)	
Short-Term Pool Net	(78,929,350.74)	
		10,223,662.17
	Disposals Paydowns Redemptions Short-Term Pool Net Purchases Disposals Paydowns Redemptions Short-Term Pool Net Purchases Disposals Paydowns Redemptions Short-Term Pool Net	Disposals (516,051,736.34) Paydowns (7,257,648.33) Redemptions (16,550,446.26) Short-Term Pool Net 74,774,923.32 Purchases 476,837,598.52 Disposals (345,704,992.25) Paydowns (2,406,379.24) Redemptions (11,270,196.97) Short-Term Pool Net (134,178,071.92) Purchases 455,823,425.22 Disposals (341,284,847.17) Paydowns (2,967,306.24) Redemptions (22,418,258.90)

* 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, (\$18,406,428.58) 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	1,065,621,158
- Pending Payable	18,406,429
Net	1,047,214,729

INVESTMENT ACTIVITY April 1, 2021 -- June 30, 2021

Total B Purchas	ook Value Invested @ 04/01/21			\$	17,452,259,644.20
372	Cash Equivalents	\$	723,809,885.40		
229	Fixed Income Securities	Ψ	336,788,201.10		
0	Principal Paydowns		-		
0	Redemptions / Maturities		_		
989	Equity Securities		746,088,116.04		
30	Real Estate		58,718,759.27		
111	Alternative Investments		219,677,852.51		
205	Additional Categories		277,329,155.08		
1936	Total Purchases		, ,	\$	2,362,411,969.40
Disposa	als:			·	, ,
318	Cash Equivalents	\$	862,142,384.74		
63	Fixed Income Securities		305,859,376.62		
311	Principal Paydowns		12,631,333.81		
22	Redemptions / Maturities		35,166,501.75		
916	Equity Securities		506,047,701.36		
43	Real Estate		23,141,836.34		
173	Alternative Investments		120,911,682.02		
203	Additional Categories		247,080,979.42		
0	Additional Principal Paydowns		-		
21	_Additional Redemptions / Maturities		15,072,400.38		
2070	Total Disposals			\$	2,128,054,196.44
Total B	ook Value Invested @ 06/30/21			\$	17,686,617,417.16
Total Par Value Invested @ 06/30/21			\$	17,683,119,478.77	
Total M	arket Value Invested @ 06/30/21			\$	25,728,805,148.02

^{*} 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, (\$18,406,428.58 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	1,065,621,158
- Pending Payable	18,406,429
Net	1,047,214,729

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

FROM: Gary L. Harbin, CPA

Executive Secretary

DATE: September 20, 2021

RE: Report of the Insurance Committee

On September 20, 2021, prior to the quarterly board meeting, the Insurance Committee will meet. Thereafter, the committee will report to the board on the following matters:

- 1. KEHP rates for 2022. A health insurance benefit supplement is being recommended to the committee for the Kentucky Employees' Health Plan (KEHP) up to \$704.84 per month in 2022 for those retirees fulfilling the necessary service requirements. Also, a KEHP administrative fee of \$8.00 per person per month (PPPM) for plan year 2022 is being recommended to the committee. (The administrative fee may increase beginning in July 2022 with the new state budget. Staff will report to the committee any such increase.)
- 2. MEHP rate for 2022. A rate is being recommended to the committee of up to \$211 per month for the 2022 TRS Medicare Eligible Health Plan (MEHP), which includes a combined UnitedHealthcare Medicare Advantage plan and Express Scripts Medicare Part D drug plan, for those retirees fulfilling the necessary service requirements.
- 3. Drug formulary for 2022. Staff is recommending the Insurance Committee approve the ESI Medicare High Performance Formulary for the MEHP effective January 1, 2022.

Any actions by the Insurance 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: September 20, 2021

RE: Report of the Governance and Audit Committee

The Governance and Audit Committee will have a special meeting on September 20, 2021, prior to the quarterly board meeting.

Any actions by the Governance and Audit Committee will be reported to the board with a request for those actions to be accepted and ratified.



The experience and dedication you deserve

Teachers' Retirement System of the State of Kentucky Experience Investigation for the Five-Year Period Ending June 30, 2020

Ed Koebel, Chief Executive Officer Alisa Bennett, President

September 20, 2021



Pension Recap



- ➤ HB258 March 2021
 - Introduced new tier of benefits for members hired on or after January 1, 2022
 - Estimated Projected Savings for next 30 years in Employer Contributions over all plans = \$3.6B
- ➤ Experience Investigation June 2021
 - Reviewed all actuarial assumptions and methods used in the valuation and projection analysis
- ➤ Asset Experience August 2021
 - 29.94% resulting in \$6 billion for the retirement annuity
 - Will be phased-in over next 5 valuations using smoothing method
- ➤ Board Meeting September 2021
 - Implementation of actuarial determinations

Experience Investigation Determinations Pension



- > Significant Changes
 - Lower the investment return assumption for all plans to 7.10%
 - Lower the payroll growth assumption used in the level percentage of payroll amortization methodology from 3.50% to 2.75%
 - Generational Mortality and update to new Public Sector Mortality Tables
 - In addition to experience study determinations, TRS achieved record investment gains in FYE 21 that exceed impact of actuarial determinations

Experience Investigation Determinations Pension



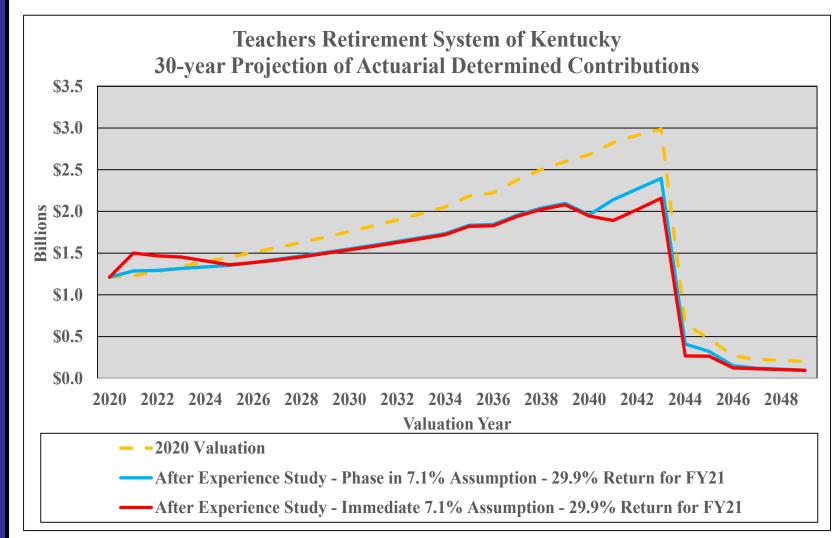
> Implementation Options

Under all scenarios, full funding is reached at the same date

- Implement all changes immediately for 2021 valuation
- Implement all changes immediately and phase-in contributions over five years to match the current five-year smoothing of investment gains
- Implement mortality changes immediately while phasing in other changes over the next five years

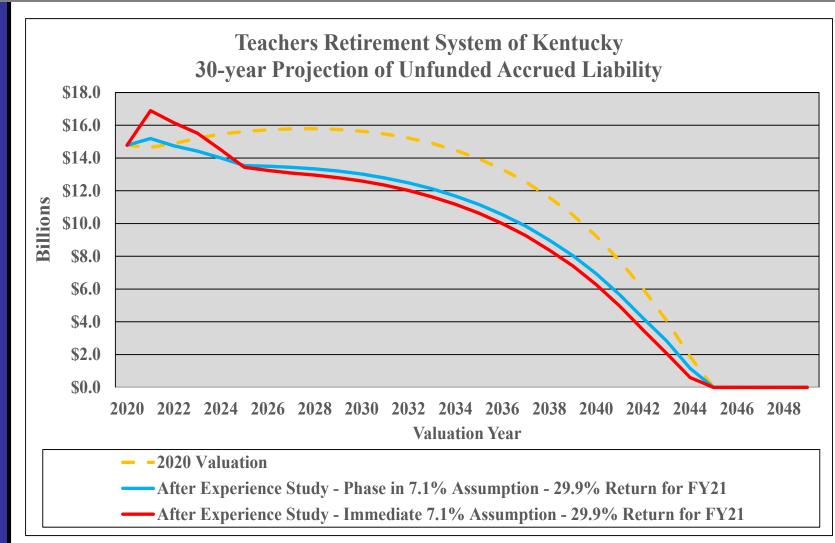
TRS Projections Pension Financial Impact – Next 30 years





TRS Projections Pension Financial Impact – Next 30 years





Recommendations to Board



> Retirement Annuity Trust

Implement all changes immediately and phase-in contributions over five years to match the current five-year smoothing of investment gains

Health Trust Recap



- ➤ HB258 March 2021
 - Introduced new tier of benefits for members hired on or after January 1, 2022
 - Estimated Projected Savings for next 30 years in Employer Contributions in OPEB Health Trust = \$0.95B
- ➤ Experience Investigation June 2021
 - Reviewed all actuarial assumptions and methods used in the valuation and projection analysis
- ➤ Asset Experience August 2021
 - 31.53% resulting in \$500 million for health insurance
 - Will be phased-in over next 5 valuations using smoothing method
- ➤ Board Meeting September 2021
 - Implementation of actuarial determinations

Experience Investigation Determinations Health Trust



> Significant Changes

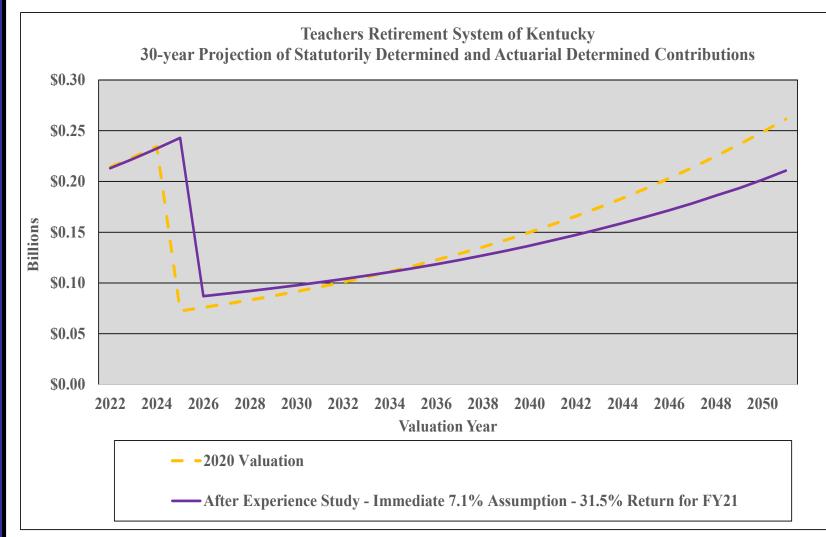
- Lower the investment return assumption for all plans to 7.10%
- Lower the inflation assumption, which leads to lower ultimate healthcare trend assumption
- In addition to experience study determinations, TRS achieved record investment gains in FYE 21 that exceed impact of actuarial determinations

> Implementation Options

- Implement all changes immediately for 2021 valuation
- Implement all changes immediately and phase-in contributions over five years to match the current five-year smoothing of investment gains
- Implement mortality changes immediately while phasing in other changes over the next five years

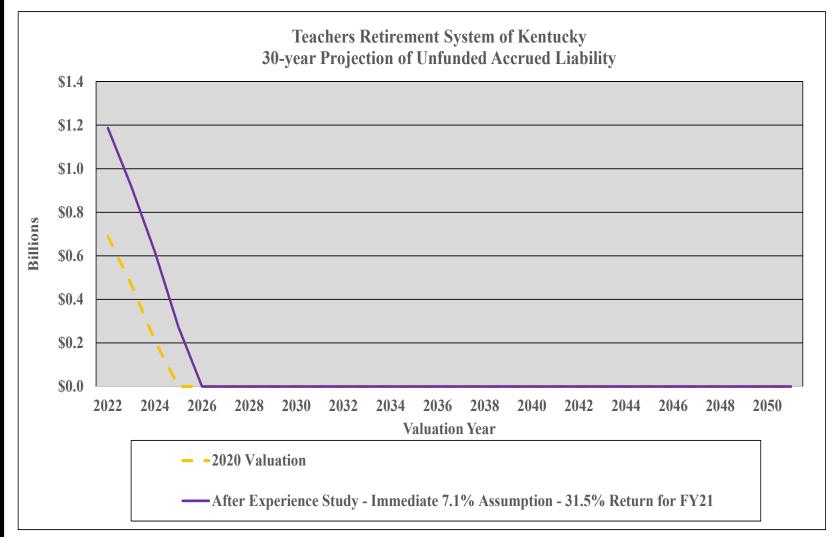
TRS Projections Health Trust Financial Impact – Next 30 years





TRS Projections Health Trust Financial Impact – Next 30 years





Recommendations to Board



- ➤ Retiree Health Insurance Trust
 - Adopt all changes immediately

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

FROM: Gary L. Harbin, CPA

Executive Secretary

DATE: September 20, 2021

RE: Report of the Legislative Committee

The Legislative Committee will have a special meeting on September 20, 2021, prior to the quarterly board meeting. The committee will present a report to the board during the quarterly meeting.

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

FROM: Gary L. Harbin, CPA

Executive Secretary

DATE: September 20, 2021

SUBJECT: Executive Secretary's Observations and Comments

1. <u>Trustee Education Program</u>: The TRS Board of Trustees always has been devoted to gaining timely and relevant training on matters related to the proper administration of the retirement system. The board expressed its dedication to continuing education on November 17, 2008, when it adopted the Teachers' Retirement System Trustee Education Program in accordance with KRS 161.250(3)(c). The policy is contained in Appendix 9 of the Board Governance Manual. Chapter 3, subparagraph 6 of the policy provides that the executive secretary will report concerning this program each year at the September board meeting.

From July 2020 through June 2021, trustees attended 267.5 hours of combined approved training in accordance with the program. The approved training activities included a mix of programs and activities presented by national retirement associations, TRS staff and TRS service providers with expertise in investments, law and actuarial concepts. Topics covered a broad range of subjects, including pension and medical benefits administration, investment concepts, legal compliance, fiduciary duty and other matters that enhance the effectiveness of trustees in fulfilling their roles and satisfying their duties under law.

TRS staff also assisted with providing specific training to trustees. TRS staff presented a one-day workshop that focused primarily on investment concepts, ethics and governance matters.

- 2. <u>Annual Trustee Workshop</u>: TRS staff is planning a one-day trustee workshop that will focus on current issues in the administration of the retirement system. Staff anticipates presentations on funding, plan design, actuarial issues, investment concepts, ethics, governance and other matters. The trustee workshop is tentatively scheduled for Monday, November 22, 2021.
- 3. <u>GASB Statement Nos. 67 and 68</u>: In June 2012, the Governmental Accounting Standards Board (GASB) approved two statements concerning the accounting and financial reporting of pensions by state and local governments and pension plans. Statement No. 67, *Financial Reporting for Pension Plans*, addresses financial reporting for state and local government pension plans. Statement No. 68, *Accounting and Financial Reporting for Pensions*, establishes new accounting and financial reporting requirements for governments that provide their employees with pensions. While the two statements were being developed, TRS took an active role in communicating issues and concerns to GASB through a consortium of similarly situated public pension plans.

Statement No. 67 took effect for the fiscal year ending June 30, 2014. Statement No. 68 took effect for the state and universities for the fiscal year ending June 30, 2015.

Because of some concern expressed previously as to how these accounting standards apply to Kentucky school districts, particularly whether these new accounting standards would affect the budgets of the districts, two important points should be noted.

First, as a critical reminder, GASB standards generally apply only to financial reporting. They do not mandate how a governmental pension plan is to be funded. In Kentucky, the commonwealth has a statutory obligation to provide pension funding through the employer retirement contributions it makes on behalf of teachers and administrators and, for members prior to January 1, 2022, payments toward the unfunded liability. As such, the responsibility for making employer contributions and addressing the pre-2022 unfunded liability of TRS rests with the commonwealth, not the local school districts. The new GASB accounting standards do not change the funding responsibility. GASB accounting standards do not require school districts to make employer contributions to TRS.

Second, while these GASB accounting standards impose financial reporting standards on governmental employers regarding pension liability, Kentucky is very different from other states in that Kentucky teachers and administrators generally are treated as employees of the commonwealth for pension and other purposes. Given this circumstance, GASB has confirmed that the commonwealth is responsible for reporting the annual required contributions and pension liabilities. Furthermore, GASB also has confirmed that Kentucky schools are not required to report a share of the pension liability in district financial statements.

TRS GASB 67 and 68 Reports: TRS published the accounting information required under Statement No. 67 in TRS's annual financial report for the fiscal years ending June 30, 2020 and 2019.

On July 30, 2021, TRS published the "GASB Statement No. 68 Report ... Prepared as of and for the year ended June 30, 2020" for use by the state and other TRS employers. TRS's report was audited by the external auditor, which expressed the opinion that the schedules present fairly, in all material respects, the employer allocation and other matters addressed.

GASB Statement Nos. 74 and 75: In June 2015, GASB approved two statements concerning the accounting and financial reporting of other postemployment benefits (OPEB) by state and local governments and benefit plans. Statement No. 74, Financial Reporting for Postemployment Benefits Other Than Pension Plans, addresses financial reporting for OPEB plans. Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, establishes new accounting and financial reporting requirements for governments that provide their employees with OPEB.

TRS GASB 74 and 75 Reports: TRS published the accounting information required under Statement No. 74 in TRS's annual financial report for the fiscal years ending June 30, 2020 and 2019.

On July 6, 2021, TRS published the "GASB Statement No. 75 Report ... Prepared as of and for the fiscal year ended June 30, 2020" for use by the state and other TRS employers. TRS's report was audited by the external auditor, which expressed the opinion that the schedules present

fairly, in all material respects, the employer allocation and other matters addressed.

The GASB Statement Nos. 68 and 75 reports and the external audit reports are available for review by the board.

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

June 28-29, 2021	Attended NCTR System Directors Meeting
July 8, 2021	Meeting with Kentucky Public Pensions Authority (KPPA) staff
July 9, 2021	Meeting with KPPA staff
July 13, 2021	Meeting with legal advisors
July 15, 2021	Attended Asset Allocation webinar
July 16, 2021	Meeting with public relations consultant
July 19, 2021	Meeting with actuary
July 20, 2021	Attended Interim Joint Committee on State Government meeting
August 5, 2021	Meeting with Bellwether Enterprise
August 5, 2021	Meeting with public relations consultant
August 10, 2021	Meeting with Todd Asset Management
August 18, 2021	Attended KEA-R board meeting
August 23, 2021	Meeting with actuary
August 24, 2021	Meeting with public relations consultant
August 27, 2021	Attended KRTA workshop
September 3, 2021	Meeting with actuary
September 16, 2021	Attended Know Your Rx Coalition Board Meeting

5. Next Meeting: The next quarterly meeting of the board will be December 20, 2021.