



TEACHERS' RETIREMENT SYSTEM

of the State of Kentucky

BOARD OF TRUSTEES

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GARY L. HARBIN, CPA
Executive Secretary

Regular Quarterly Meeting of the
TRS Board of Trustees

A G E N D A

September 21, 2020, 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 15, 2020

1.1.2. Special Meeting of the Legislative Committee, June 15, 2020

1.1.3. Special Meeting of the Governance and Audit Committee, June 15, 2020

1.1.4. Special Meeting of the Insurance Committee, June 15, 2020

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. 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 21, 2020

SUBJECT: Reports for Consent

1.1. Consideration/Approval of Minutes

- 1.1.1. Quarterly Meeting of the Board of Trustees held June 15, 2020
- 1.1.2. Special Meeting of the Legislative Committee held June 15, 2020
- 1.1.3. Special Meeting of the Governance and Audit Committee held June 15, 2020
- 1.1.4. Special Meeting of the Insurance Committee held June 15, 2020

1.2. Applications for Retirement and Annuity

The list of members who retired June, July and August 2020 is included in the board materials. Attached is a summary of the particular payments and a comparison to the same period last year. Initial retirements for the period included 1,119 retirees with monthly payments totaling \$3,790,331.09. During the same period last year, there were 1,223 retirements with monthly payments totaling \$4,121,440.46.

Recommendation: The board is requested to approve the initial payments listed in the report.

1.3. Survivor Benefits

The list of persons qualifying for survivor benefit payments for the quarter April 1, 2020, through June 30, 2020, is included in the board materials. During the period, there were 16 survivor benefits with a total monthly payment of \$7,837.22.

Recommendation: The board is requested to approve the survivor benefit payments for the period April 1, 2020, through June 30, 2020, as listed in the report.

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, 2020, through June 30, 2020, is included in the board materials. There were 6 payments to the estates or beneficiaries of active teachers and 247 payments to the estates or beneficiaries of retired teachers for total payments of \$1,247,000. During the same quarter in 2019, there were 302 payments in the amount of \$1,486,000.

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

1.5. Refunds

The report of refunds for the quarter ended June 30, 2020, is also attached. There were 296 refunds for the quarter April 1, 2020, through June 30, 2020, and the amount refunded was \$3,641,860.70. The refunds are for the following categories:

Regular withdrawals	277	\$3,241,396.02
Deaths	<u>19</u>	<u>\$ 400,464.68</u>
Totals	296	\$3,641,860.70

During the same quarter in 2019 there were 491 refunds totaling \$5,328,381.40.

Recommendation: The board is requested to approve the payment of refunds as listed in the report.

1.6. Interim Financial Statements

Attached are the Interim Financial Statements for the quarter ended June 30, 2020.

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

Teachers' Retirement System of Kentucky
Initial Applications for Retirement and Annuity
2020

	June	July	August	Total	Same Period 2019
Handicapped Child	<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
Disability Retirement	<i>2</i> \$3,483.52	<i>10</i> \$28,900.46	<i>13</i> \$32,404.52	<i>25</i> \$64,788.50	<i>41</i> \$124,927.29
Service Retirement	<i>251</i> \$805,567.19	<i>652</i> \$2,336,508.70	<i>188</i> \$574,335.60	<i>1,091</i> \$3,716,411.49	<i>1,178</i> \$3,981,937.17
Beneficiary of Member Eligible to Retire	<i>2</i> \$2,339.37	<i>1</i> \$6,791.73	<i>0</i> \$0.00	<i>3</i> \$9,131.10	<i>4</i> \$14,576.00
TOTALS	<i>255</i> \$811,390.08	<i>663</i> \$2,372,200.89	<i>201</i> \$606,740.12	<i>1,119</i> \$3,790,331.09	<i>1,223</i> \$4,121,440.46

**Reports for Consent
Member Account Refunds
For the period April 2020 - June 2020**

Active Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
April	87	334,880.26	83,338.42	758,758.47	1,176,977.15
May	100	369,488.41	92,372.10	525,671.56	987,532.07
June	91	386,572.33	96,590.55	593,723.92	1,076,886.80
Total	277				3,241,396.02

Deceased Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
April	10	114,773.50	28,693.38	1,511.76	144,978.64
May	4	1,052.14	153.41	0.00	1,205.55
June	5	204,733.91	49,546.58	0.00	254,280.49
Total	19				400,464.68

Total Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
April	97	449,653.76	112,031.80	760,270.23	1,321,955.79
May	104	370,540.55	92,525.51	525,671.56	988,737.62
June	96	591,306.24	146,137.13	593,723.92	1,331,167.29
Total	296				3,641,860.70

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY



INTERIM FINANCIAL STATEMENTS

QUARTER ENDED JUNE 30, 2020

(FAIR VALUE - UNAUDITED)

Statements of Plan Net Assets
as of June 30, 2020 and 2019
(Fair Value - Unaudited)

	Retirement Annuity Trust		Health Insurance Trust		Life Insurance Trust		Other Funds		TOTAL	
	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019
ASSETS										
Cash	\$ 145,187,806	\$ 86,053,651	\$ 59,313,497	\$ 35,499,235	\$ -	\$ 261,416	\$ 32,119	\$ 239,187	\$ 204,533,422	\$ 122,053,489
Receivables										
Contributions	53,939,286	38,277,522	25,205,437	22,738,889	13,058	19,353			79,157,781	61,035,764
State of Kentucky	-	-	-	826,203	178,131	120,308			178,131	946,511
Investment Income	42,747,821	51,446,307	2,942,288	2,420,395	273,122	325,174	2,682	3,345	45,965,913	54,195,221
Investment Sales Receivable	14,904,196	12,620,835	1,494,412	1,081,560	13,018	-			16,411,626	13,702,395
Installment Account Receivable	88,387	154,386							88,387	154,386
Other Receivables	22,170	8,621	31,412,496	27,671,716					31,434,666	27,680,337
Due from Other Funds	2,084,771	1,835,025							2,084,771	1,835,025
Total Receivables	113,786,631	104,342,696	61,054,633	54,738,763	477,329	464,835	2,682	3,345	175,321,275	159,549,639
Investments at Market Value										
Short Term Investments	757,664,315	678,260,542	26,908,534	74,104,999	12,219,575	13,451,102	354,977	355,729	797,147,401	766,172,372
Bonds and Mortgages	2,942,102,333	3,227,674,773	128,746,941	112,630,744	14,143,524	19,859,044	315,524	268,672	3,085,308,322	3,360,433,233
Stocks	12,593,762,661	12,288,549,261	914,010,573	768,005,547	55,860,313	48,261,798	348,641	334,537	13,563,982,188	13,105,151,143
Alternative Investments	1,465,067,724	1,359,374,419	113,773,957	102,153,229	361,320	48,510			1,579,203,001	1,461,576,158
Real Estate	1,227,834,915	1,223,062,000	82,393,040	75,296,027	2,399,699	2,107,202			1,312,627,654	1,300,465,229
Additional Categories	1,549,337,817	1,432,019,602	262,798,450	203,521,400	2,034,758	1,354,418			1,814,171,025	1,636,895,420
Total Investments	20,535,769,765	20,208,940,597	1,528,631,495	1,335,711,946	87,019,189	85,082,074	1,019,142	958,938	22,152,439,591	21,630,693,555
Capital Assets	12,072,094	14,087,302							12,072,094	14,087,302
(net of accumulated depreciation)										
Total Assets	20,806,816,296	20,413,424,246	1,648,999,625	1,425,949,944	87,496,518	85,808,325	1,053,943	1,201,470	22,544,366,382	21,926,383,985
LIABILITIES										
Liabilities										
Accrued Expenses and Other Liabilities	8,559,121	6,474,507	9,039,424	5,920,066	52,641				17,651,186	12,394,573
State of Kentucky			14,762,969						14,762,969	-
Contributions Not Posted	-	-	291,343	-					291,343	-
Investment Purchases Payable	64,834,604	20,311,797	3,323,593	2,902,101	12,321	-	-	-	68,170,518	23,213,898
Investment Fees Payable	16,422,249	14,728,037	2,859,798	1,304,530	27,685	19,654	-	-	19,309,732	16,052,221
Due to Other Funds	-	-	2,047,238	1,803,191	35,980	30,392	1,554	1,442	2,084,772	1,835,025
Revenues Collected in Advance	-	-	-	-					-	-
Total Liabilities	89,815,974	41,514,341	32,324,365	11,929,888	128,627	50,046	1,554	1,442	122,270,520	53,495,717
NET ASSETS HELD IN TRUST										
FOR PENSION BENEFITS	\$ 20,717,000,322	\$ 20,371,909,905	\$ 1,616,675,260	\$ 1,414,020,056	\$ 87,367,891	\$ 85,758,279	\$ 1,052,389	\$ 1,200,028	\$ 22,422,095,862	\$ 21,872,888,268

Statements of Changes in Plan Net Assets
For the Twelve Months Ended June 30, 2020 and 2019
(Fair Value - Unaudited)

	Retirement Annuity Trust		Health Insurance Trust		Life Insurance Trust		Other Funds		TOTAL	
	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019	FY 2020	FY 2019
ADDITIONS										
Contributions										
Employer- State Paid	\$ 1,048,192,668	\$ 1,051,451,775	\$ 77,191,060	\$ 76,381,841	\$ 1,543,413	\$ 1,209,055	\$ -	\$ -	\$ 1,126,927,141	\$ 1,129,042,671
Employer- LSD, Other	86,088,427	71,583,048	107,434,414	106,764,314	252,976	212,172	-	267,554	193,775,817	178,827,088
Member- Active	324,664,055	321,172,166	133,470,962	131,432,243					458,135,017	452,604,409
Member- Retired			59,338,283	58,012,038					59,338,283	58,012,038
Recovery Income			100,375,748	84,321,497					100,375,748	84,321,497
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Total Contribution	1,458,945,150	1,444,206,989	477,810,467	456,911,933	1,796,389	1,421,227	-	267,554	1,938,552,006	1,902,807,703
Investment Income/(Loss)										
Net Appreciation/(Depreciation) in										
Fair Value of Investments	723,233,155	651,487,372	19,256,856	63,835,895	3,954,293	3,706,871	60,956	43,282	746,505,260	719,073,420
Interest	171,256,317	159,741,150	11,545,773	9,120,053	690,620	764,520	15,335	21,645	183,508,045	169,647,368
Dividends	234,318,496	304,120,073	7,331,916	6,724,667	719,334	727,547	6,758	6,365	242,376,504	311,578,652
Rental Income, Net	27,049,513	28,402,562							27,049,513	28,402,562
Securities Lending, Net	2,228,729	2,604,444			37,974	31,954	440	560	2,267,143	2,636,958
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Gross Investment Income	1,158,086,210	1,146,355,601	38,134,545	79,680,615	5,402,221	5,230,892	83,489	71,852	1,201,706,465	1,231,338,960
Less Investment Expense	(64,062,834)	(61,166,252)	(5,659,596)	(5,295,133)	(236,018)	(172,703)	-	(15,830)	(69,958,448)	(66,649,918)
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Net Investment Income	1,094,023,376	1,085,189,349	32,474,949	74,385,482	5,166,203	5,058,189	83,489	56,022	1,131,748,017	1,164,689,042
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Total Additions	2,552,968,526	2,529,396,338	510,285,416	531,297,415	6,962,592	6,479,416	83,489	323,576	3,070,300,023	3,067,496,745
DEDUCTIONS										
Benefits	2,167,239,241	2,094,364,072			5,317,000	5,153,000	229,574	244,424	2,172,785,815	2,099,761,496
Refunds of Contributions	28,472,217	32,403,149							28,472,217	32,403,149
Under 65 Insurance Expenses			109,708,027	114,509,069					109,708,027	114,509,069
Over 65 Insurance Expenses			195,874,947	191,245,906					195,874,947	191,245,906
Administrative Expense	12,166,651	12,352,308	2,047,238	1,803,192	35,980	30,393	1,554	1,442	14,251,423	14,187,335
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Total Deductions	2,207,878,109	2,139,119,529	307,630,212	307,558,167	5,352,980	5,183,393	231,128	245,866	2,521,092,429	2,452,106,955
Net Increase (Decrease)										
	345,090,417	390,276,809	202,655,204	223,739,248	1,609,612	1,296,023	(147,639)	77,710	549,207,594	615,389,790
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS										
Beginning of year	20,371,909,905	19,981,633,096	1,414,020,056	1,190,280,808	85,758,279	84,462,256	1,200,028	1,122,318	21,872,888,268	21,257,498,478
Ending of period	\$ 20,717,000,322	\$ 20,371,909,905	\$ 1,616,675,260	\$ 1,414,020,056	\$ 87,367,891	\$ 85,758,279	\$ 1,052,389	\$ 1,200,028	\$ 22,422,095,862	\$ 21,872,888,268
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TO: Board of Trustees of the Teachers' Retirement System of the State of Kentucky

FROM: Gary L. Harbin, CPA
Executive Secretary

DATE: September 21, 2020

SUBJECT: Report of the Investment Committee

1. Investment Committee Meeting and Actions: No new investments were presented at the August 20, 2020, Investment Committee meeting. Outside managers Fort Washington public equity, Fort Washington private equity, Lord Abbett High Yield and Galliard Capital Management presented on their respective portfolios.

2. Purchases and Disposals: The Report of the Investment Committee for the quarter ended June 30, 2020, is presented for review and approval. During this quarter, 2,898 purchases amounted to \$3,400,196,955.66, and 3,486 disposals amounted to \$3,218,684,523.74. The disposals consisted of 3,138 sales, 323 principal payments and 25 redemptions. While TRS investment staff members initiate 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, the TRS's invested securities had a book value of \$16,058,165,106.86 and a market value of \$20,536,080,187.97.

3. Staff's Comments on Economic and Market Conditions: The pressures markets experienced in the first quarter of calendar 2020 abated throughout the second quarter as various programs enacted by the Federal Reserve proved successful in restoring normal capital markets activity. Risk assets were consistently bid higher, with nearly every major asset class producing strong returns. The NASDAQ and Dow Jones Industrial Average experienced their best quarters since 2001 and 1987, respectively, while equity issuance in the United States hit a record of \$184 billion. On the debt side, the first half of 2020 also saw a record in corporate credit issued. Companies with investment-grade ratings issued more than \$1.2 trillion during the first six months of the year, double the amount over the same period in 2019. Additionally, companies with junk ratings saw year-over-year issuance increases of nearly 40%. In a sign that market participants continue to look past the near-term effects of the pandemic and the unprecedented new supply coming to market, credit spreads narrowed across the quality spectrum. Going forward, it remains to be seen whether markets can maintain their trajectory if income-replacing programs are not renewed.

U.S. equity markets snapped back significantly in the second quarter despite weakening economic conditions and uncertainty around upcoming earnings releases. The swift rally saw the S&P 500 finish the quarter up 20.5%, but still down 3.1% year to date. The positive performance was realized across all market caps, with smaller stocks faring best. Growth continued to outperform value by a significant margin during the second quarter across all market caps. An increase in risk sentiment saw investors shifting away from the

low-volatility names that provided downside protection during the first quarter sell-off. Large-cap value managers performed better, relative to their respective benchmarks, than their large-cap core and growth counterparts in the second quarter.

Developed international markets had a strong quarter, although they lagged both U.S. and emerging markets. During the quarter, value stocks underperformed growth, while small-cap stocks outperformed their larger counterparts. Each developed country index generated positive returns for the quarter, and the vast majority saw double-digit returns. Emerging markets outpaced the developed international space but lagged the U.S. market. Like other regions, value stocks underperformed growth, while small-cap outperformed large-cap stocks. All emerging countries and sectors saw positive returns for the quarter.

The Bloomberg U.S. Aggregate Bond index had another strong quarter, returning 2.9%. In contrast to the first quarter, investor appetite for risk returned, leading to a strong recovery in credit. Meanwhile, U.S. Treasury yields saw little movement across the curve. It was a weak quarter for government bonds as all short and intermediate maturities were yielding below 1%. BBB-rated bond returns led all investment-grade credit. The lowest-rated debt made a comeback late in the quarter, indicating some hesitation by investors to go too far down in quality amid continued market uncertainty. Overall, the Bloomberg U.S. Credit index and U.S. High Yield index returned 8.2% and 10.2% in the second quarter, respectively.

Core private real estate fell 1.6% during the second quarter as reported by the NCREIF ODCE index, broken down to 0.9% from income and 2.5% price depreciation.

4. **Performance:** Investment performance was strong for the quarter ending June 30, 2020. The Retirement Annuity Trust Fund's portfolio appreciated 14.48%, outperforming the Policy index, which increased 13.3%. TRS's domestic equities gained 24.62%, outgaining the S&P 1500 Stock index's 20.77% increase for the quarter. TRS's international stocks returned 23.52%, outperforming the MSCI All Country ex U.S. index's 16.3% return for the quarter. Alternatives and real estate were laggards as private equity was down 7.5%, while real estate was even. TRS's fixed income returned 4.14%, outperforming the Bloomberg Barclays Gov/Credit Bond index, which returned 3.71% 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 June 30, 2020

FINAL

	Market Value	Last Qtr	FYTD	1-Year	3-Year*	5-Year*	10-Year*	20-Year*
TOTAL PLAN	\$20,536,080,187.97	14.48	5.80	5.80	7.48	7.23	9.59	6.09
<i>Policy Benchmark</i>		13.30	4.23	4.23	6.97	7.21	9.25	-
Total Equity	\$12,717,724,882.79	24.27	6.32	6.32	8.01	7.93	11.83	5.61
Domestic Equity	\$ 8,170,741,415.28	24.62	6.63	6.63	9.22	9.15	13.54	6.40
<i>S&P 1500 Index</i>		20.77	6.08	6.08	9.91	10.20	13.75	5.86
All-Cap Equities	\$ 366,599,056.52	20.93	9.98	9.98	9.54	-	-	-
<i>Russell 3000 Index</i>		22.03	6.53	6.53	10.04	-	-	-
Large-Cap Equities	\$ 6,813,551,300.23	24.86	8.16	8.16	9.92	9.53	13.69	-
<i>S&P 500 Index</i>		20.54	7.51	7.51	10.73	10.73	13.99	-
Mid-Cap Equities	\$ 622,190,789.31	24.81	-2.35	-2.35	6.32	7.86	12.81	-
<i>S&P 400 Index</i>		24.07	-6.70	-6.70	2.39	5.22	11.34	-
Small-Cap Equities	\$ 368,400,269.22	23.48	-6.76	-6.76	2.01	5.25	12.27	-
<i>S&P 600 Index</i>		21.94	-11.29	-11.29	0.56	4.48	11.24	-
International Equity	\$ 4,546,983,467.51	23.52	5.64	5.64	5.88	5.47	7.63	-
<i>MSCI AC World Ex US</i>		16.30	-4.39	-4.39	1.61	2.74	5.45	-
Fixed Income	\$ 3,081,756,122.71	4.14	10.45	10.45	6.28	5.15	4.75	5.90
<i>Bloomberg Barclays Govt/Credit Index</i>		3.71	10.02	10.02	5.87	4.74	4.13	5.31
Real Estate	\$ 1,227,834,915.29	0.00	4.54	4.54	8.59	9.63	8.84	9.16
In House Real Estate Equity	\$ 408,820,071.59	1.63	2.83	2.83	8.58	8.81	8.23	8.61
<i>CPI plus 2%</i>		0.21	2.72	2.72	3.78	3.63	3.74	4.03
Core Real Estate	\$ 501,164,147.02	1.37	6.46	6.46	7.72	9.03	11.74	-
<i>NCREIF ODCE (VW) Index</i>		-1.55	2.23	2.23	5.66	7.31	10.80	-
Non-Core Real Estate	\$ 317,850,696.68	-4.03	4.00	4.00	9.50	11.69	-	-
<i>NCREIF Property Index</i>		-0.99	2.69	2.69	5.44	6.77	-	-
Private Equity	\$ 1,209,514,167.45	-7.50	0.18	0.18	10.65	9.70	11.75	-
Mature Private Equity	\$ 528,970,953.44	-8.67	-2.56	-2.56	8.29	6.83	-	-
<i>S&P 500 Index plus 3%</i>		21.44	10.73	10.73	14.05	14.05	-	-
Private Equity < 5 Years	\$ 680,543,214.01	-6.17	2.07	2.07	12.47	11.98	-	-
Timberland	\$ 255,553,556.38	1.05	4.36	4.36	0.59	1.94	3.94	-
<i>NCREIF Timberland Index</i>		0.08	0.34	0.34	2.28	2.71	4.39	-
Additional Categories	\$ 1,579,354,781.49	2.45	-2.78	-2.78	2.93	3.45	6.42	-
<i>B of A Merrill Lynch U.S. High Yield Master II Index</i>		9.61	-1.10	-1.10	2.94	4.58	6.48	-
Cash (Unallocated)	\$ 464,341,761.86	0.03	1.31	1.31	1.67	1.16	0.63	1.78
<i>90 Day T-Bill</i>		0.02	1.63	1.63	1.77	1.17	0.62	1.58

Total Trust Gross Return for 30-year period* 7.98

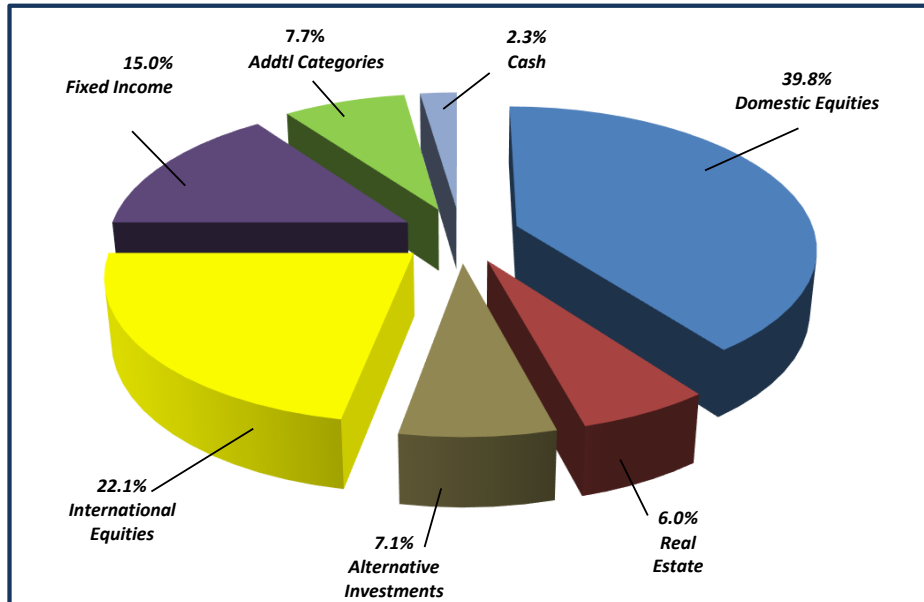
*Returns are annualized for periods longer than one year

** 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.

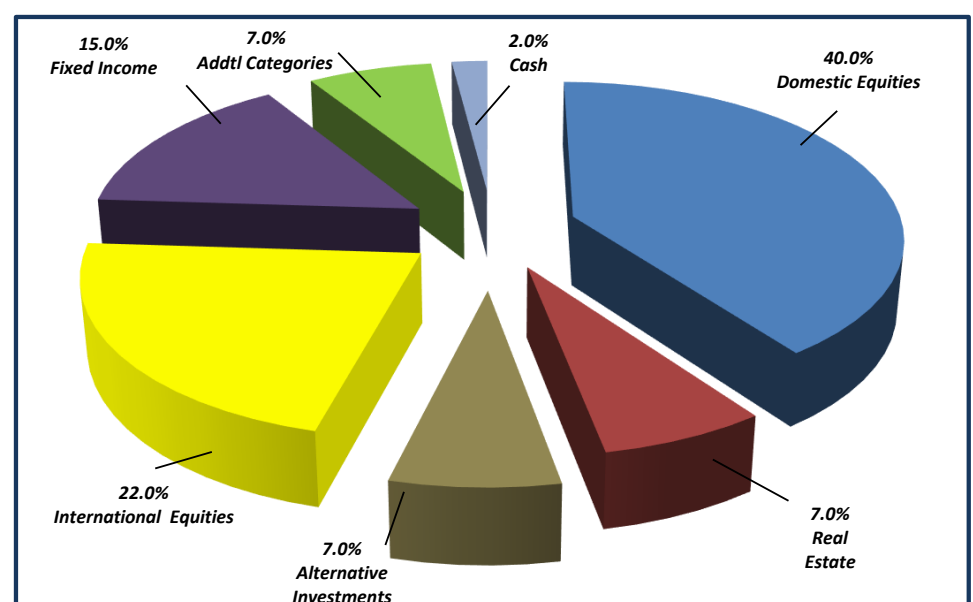
Teachers' Retirement System of Kentucky
Quarterly Investment Update
For the period ended June 30, 2020

(\$ in millions)	\$'s	6/30/2020 Actual %	3/31/2020 Actual %	Target %	Strategic Ranges
Domestic Equities	\$8,170.7	39.8%	38.4%	40.0%	34.0 - 48.0%
Real Estate	1,227.8	6.0%	6.8%	7.0%	4.0 - 10.0%
Alternative Inv.	1,465.1	7.1%	8.7%	7.0%	4.0 - 10.0%
International Equities	4,547.0	22.1%	20.9%	22.0%	18.0 - 25.0%
Fixed Income	3,081.8	15.0%	15.7%	15.0%	12.0 - 19.0%
Addtl Categories	1,579.4	7.7%	8.2%	7.0%	4.0 - 10.0%
Cash	464.3	2.3%	1.3%	2.0%	1.0 - 3.0%
Total	<u>\$20,536.1</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	

ACTUAL %



TARGET %



Teachers' Retirement System of the State of Kentucky
Health Insurance Trust
Quarterly Investment Performance
Gross Returns
For the Period Ended June 30, 2020

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>TOTAL PLAN</u>	\$ 1,528,631,495.90	12.25	2.69	2.69	6.02	6.10
<i>Policy Benchmark</i>		13.05	2.60	2.60	5.80	6.31
<u>Total Equity</u>	\$ 914,544,057.37	21.88	3.24	3.24	6.46	6.74
<u>All Cap Equities</u>	\$ 102,374,118.13	40.11	17.14	17.14	11.18	-
<i>Russell 3000</i>		22.03	6.53	6.53	10.04	-
<u>Global Equities</u>	\$ 812,169,939.24	19.91	1.57	1.57	5.87	6.48
<i>MSCI AC World IMI (Net)</i>		19.83	1.17	1.17	5.55	6.11
<u>Fixed Income</u>	\$ 131,887,681.29	4.16	10.40	10.40	5.80	4.48
<i>Barclays Government Credit</i>		3.71	10.02	10.02	5.87	4.74
<u>Real Estate:</u>	\$ 82,393,040.34	-1.20	6.05	6.05	9.12	11.67
<u>Core Real Estate</u>	\$ 37,580,381.62	0.87	6.88	6.88	7.87	-
<i>NCREIF ODCE (VW)</i>		-1.55	2.23	2.23	5.66	-
<u>Non-Core Real Estate</u>	\$ 44,812,658.72	-2.86	5.43	5.43	10.08	12.43
<i>NCREIF Property Index</i>		-0.99	2.69	2.69	5.44	6.77
<u>Private Equity</u>	\$ 113,773,956.43	-7.62	-1.05	-1.05	9.66	12.03
<u>Mature Private Equity</u>	\$ 32,734,280.71	-8.16	-3.79	-3.79	9.96	12.38
<i>S&P 500 plus 3%</i>		21.44	10.73	10.73	14.05	14.05
<u>Private Equity < 5 Years</u>	\$ 81,039,675.72	-7.45	-1.60	-1.60	9.39	-
<u>Additional Categories:</u>	\$ 269,584,086.35	2.82	-2.91	-2.91	2.59	3.28
<i>B of A Merrill Lynch High Yield Master II</i>		9.61	-1.10	-1.10	2.94	4.58
<u>Cash (Unallocated)</u>	\$ 16,448,674.12	0.04	1.32	1.32	1.74	1.19
<i>90 Day T-Bill</i>		0.02	1.63	1.63	1.77	1.17

*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

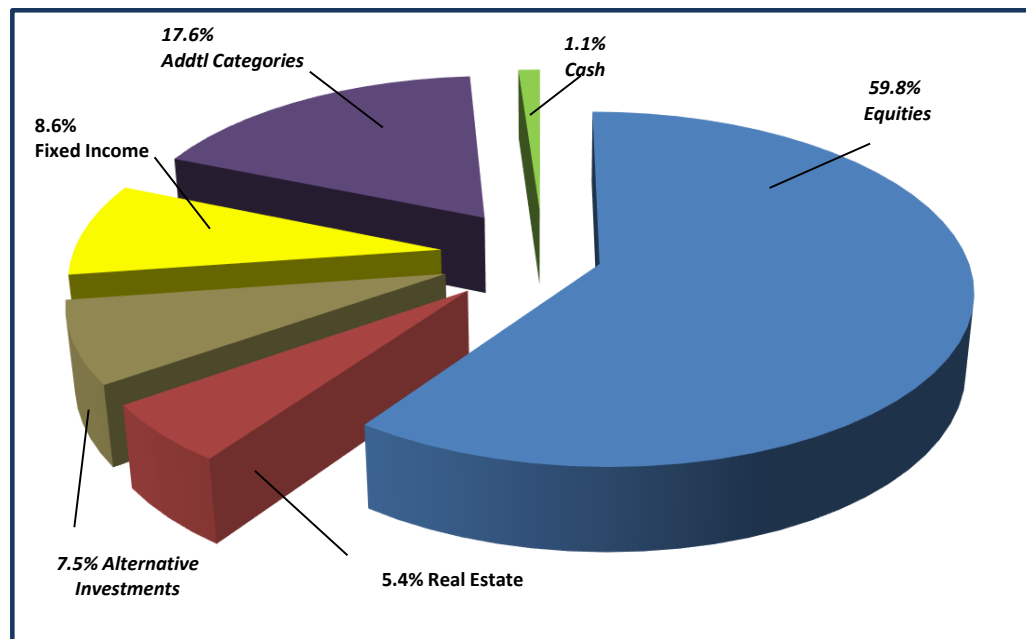
Insurance Trust Fund

Quarterly Investment Update

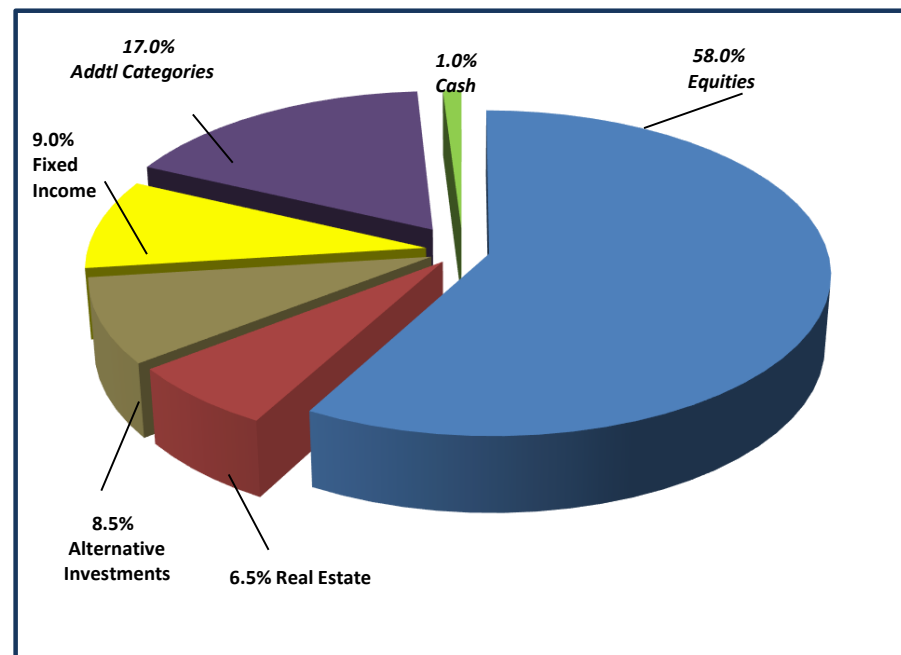
For the period ended June 30, 2020

(\$ in thousands)	\$'s	6/30/2020 Actual %	3/31/2020 Actual %	Target %	Strategic Ranges
Equities	\$914,544.0	59.8%	55.8%	58.0%	51.0 - 64.0%
Real Estate	\$82,393.0	5.4%	6.2%	6.5%	4.0 - 12.0%
Alternative Inv.	\$113,774.0	7.5%	9.1%	8.5%	5.0 - 12.0%
Fixed Income	\$131,887.7	8.6%	9.3%	9.0%	6.0 - 12.0%
Addtl Categories	\$269,584.1	17.6%	18.7%	17.0%	14.0 - 21.0%
Cash	\$16,448.7	1.1%	0.9%	1.0%	0.0 - 4.0%
Total	<u>\$1,528,631.5</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	

ACTUAL %



TARGET %



Investment Performance

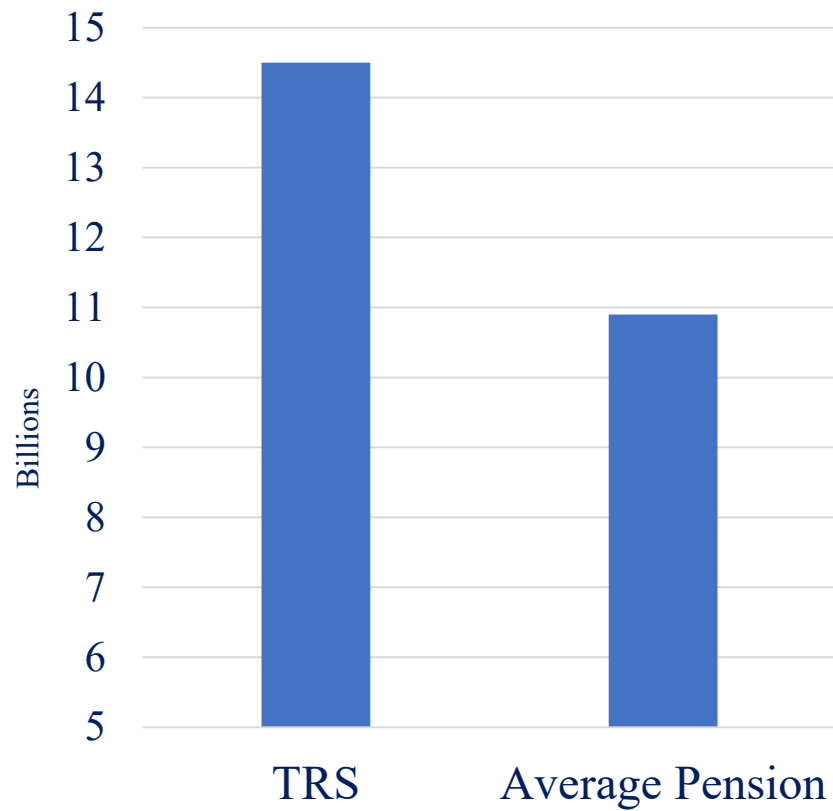
Retirement Annuity Trust Preliminary Returns as of June 30, 2020 (unaudited)

	1-year	3-year	5-year	10-year	20-year
Gross	5.8%	7.48%	7.23%	9.59%	6.09%
<i>Benchmark</i>	4.23%	6.97%	7.21%	9.25%	N/A
<i>TRS Aon Rank</i>	Top 5%	Top 4%	Top 7%	Top 3%	N/A
Net	5.5%	7.18%	6.93%	9.34%	5.93%

30-year compounded gross return
7.98%

Investment Performance

Net Earnings 2008-2020



From 2008 to June 2020, TRS investment returns totaled a net \$14.5 billion, compared to the average plan's \$10.9 billion.

This outperformance generated \$3.6 billion to the benefit of Kentucky's teachers.

TRS Approach

- TRS never has used placement agents.
- TRS has not used hedge funds.
- TRS has fiduciary duty in procurement.
- All fees disclosed in annual report and quarterly on website.

TRS Governance



DOES PUBLIC PENSION BOARD COMPOSITION IMPACT RETURNS?

*By Jean-Pierre Aubry and Caroline V. Crawford**

TRS Governance



DOES PUBLIC PENSION BOARD COMPOSITION IMPACT RETURNS?

*By Jean-Pierre Aubry and Caroline V. Crawford**

CONCLUSION

Understanding the governance structure of public pension systems – which manage over \$4 trillion in retirement assets and cover millions of participants – is important to state and local officials, plan participants, and taxpayers alike. Past research has demonstrated that the characteristics of pension boards matter and has identified aspects of a board that play a key role in its effectiveness – structure, composition, size, and tenure.

This study demonstrates significant diversity across these elements and builds a Board Effectiveness Index by scoring plans based on standards set by governance experts. The analysis finds a positive relationship – that falls just short of statistical significance – between the Index and 10-year investment returns, suggesting that best practices recommended by governance experts could produce beneficial plan outcomes. Given these results, public pension funds may be best served by taking a holistic view of the many aspects of a board that contribute to its effectiveness, rather than focusing on any single feature.

TRS Governance



DOES PUBLIC PENSION BOARD COMPOSITION IMPACT RETURNS?

By Jean-Pierre Aubry and Caroline V. Crawford*

The best practice for each feature – based on the recommendation of governance experts – is defined as follows:

- *Structure*: one fiduciary board for both investment and administrative oversight.
- *Size*: 6-10 members.
- *Stakeholder representation*: at least one ex-officio member and only 20-70 percent active and/or retired participants (i.e., a combination that avoids over- or under-representation).
- *Financial expertise*: at least two members with financial or actuarial experience.
- *Tenure*: 8-10 years of tenure, on average.

TOTAL BV INVESTED AT 03/31/20

\$ 15,876,652,674.94

April Activity

Purchases	844,575,806.23	
Disposals	(757,776,928.44)	
Paydowns	(1,551,487.93)	
Redemptions	(7,340,214.91)	
Short-Term Pool Net	<u>(43,359,865.31)</u>	34,547,309.64

May Activity

Purchases	506,784,073.83	
Disposals	(502,972,466.55)	
Paydowns	(2,223,068.06)	
Redemptions	(6,599,209.59)	
Short-Term Pool Net	<u>(7,702,566.19)</u>	(12,713,236.56)

June Activity

Purchases	671,479,659.67	
Disposals	(806,541,948.22)	
Paydowns	(2,240,014.39)	
Redemptions	(15,174,724.56)	
Short-Term Pool Net	<u>312,155,386.34</u>	159,678,358.84

TOTAL BV INVESTED AT 06/30/20

\$ 16,058,165,106.86

* 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, (\$49,930,402.61) 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	490,710,748
- Pending Payable	<u>49,930,403</u>
Net	<u><u>708,044,335</u></u>

INVESTMENT ACTIVITY

April 1, 2020 -- June 30, 2020

Total Book Value Invested @ 4/1/20 \$ 15,876,652,674.94

Purchases:

390	Cash Equivalents	\$ 1,377,357,415.93	
163	Fixed Income Securities	544,688,313.16	
1966	Equity Securities	974,167,667.05	
38	Real Estate	29,785,659.37	
91	Alternative Investments	114,694,123.75	
250	Additional Categories	359,503,776.40	
2898	Total Purchases		\$ 3,400,196,955.66

Disposals:

352	Cash Equivalents	\$ 1,116,264,461.09	
106	Fixed Income Securities	422,536,602.34	
323	Principal Paydowns	6,014,570.38	
17	Redemptions / Maturities	20,351,880.14	
2272	Equity Securities	1,252,568,341.08	
30	Real Estate	11,337,630.57	
140	Alternative Investments	97,644,439.28	
238	Additional Categories	283,204,329.94	
0	Additional Principal Paydowns	-	
8	Additional Redemptions / Maturities	8,762,268.92	
3486	Total Disposals		\$ 3,218,684,523.74

Total Book Value Invested @ 06/30/20 \$ 16,058,165,106.86

Total Par Value Invested @ 06/30/20 \$ 15,986,281,369.02

Total Market Value Invested @ 06/30/20 \$ 20,536,080,187.97

* 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, (\$49,930,402.61 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	757,974,738
- Pending Payable	49,930,403
Net	708,044,335

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

FROM: Gary L. Harbin, CPA
Executive Secretary

DATE: September 21, 2020

SUBJECT: Report of the Insurance Committee

On September 21, 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 2021. A medical insurance benefit supplement is being recommended to the committee for the KEHP up to \$687.84 per month in 2021 for those retirees fulfilling the necessary service requirements. Also, a KEHP administrative fee of \$8.00 PPPM for plan year 2021 is being recommended to the committee. (Should the state budget increase the fee beginning in July 2021, staff will report any increase in the administrative fee for plan year 2021.)
2. MEHP rate for 2021. A rate is being recommended to the committee of \$178 per month for the 2021 TRS MEHP (combined United Healthcare Medicare Advantage plan and Express Scripts Medicare Part D drug plan) for those retirees fulfilling the necessary service requirements.
3. Pharmacy benefit manager. Staff will report to the committee on contracting with the pharmacy benefit manager in conjunction with the University of Kentucky.
4. Medicare Advantage carrier. Staff will report to the committee on contracting with the Medicare Advantage carrier in conjunction with the University of Kentucky.
5. Personalized medicine service provider. Staff will report to the committee on the price contract for personalized medicine services with Coriell Life Sciences.
6. RFP for medical benefit consultant. Staff will request authorization to publish a request for proposals (RFP) for a medical benefit consultant.

This report is for information only. 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 21, 2020

SUBJECT: Report of the Governance and Audit Committee

On September 21, prior to the quarterly board meeting, the Governance and Audit Committee will meet. Thereafter, the committee will report to the board on the following matters:

1. Funding policy: The committee will discuss proposed updates to the board's funding policy. The proposals incorporate the 2019 valuation and the fiscal year 2021 state budget along with making clarifications based upon discussions with the board's actuary regarding funding requests and amortization periods. A copy of the draft to be considered by the committee is attached.
2. Payroll vendor RFP: The committee will receive a report on publishing a request for proposals (RFP) for a vendor to process employee payroll.

This report is for information only. 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.

BOARD GOVERNANCE MANUAL

APPENDIX 17

POLICY ON ANNUAL FUNDING FOR RETIREMENT ANNUITY TRUST, RETIREE HEALTH INSURANCE TRUST AND LIFE INSURANCE TRUST

INTRODUCTION

Pursuant to the provisions of KRS 161.250, the Board of Trustees (board) of the Teachers' Retirement System of the State of Kentucky (TRS) is vested with the responsibility for the general administration and management of the retirement system. The board may adopt procedures necessary to conduct the business of the retirement system as needed. The applicable provisions of the Kentucky Revised Statutes shall control if any inconsistency exists between state law and this policy.

The board's policy is to achieve full funding within specific, closed 30-year periods without extending or resetting those periods. The underpinning of this is to request, as a minimum appropriation, amounts consistent with the annual actuarial valuations. The actuary focuses on a long investment horizon to promote cost stability, predictability and equity among current and future taxpayers. This policy, as detailed below for each trust, confirms the board's process for recommending annual appropriations payable and the primary actuarial assumptions and methodologies associated with calculating the annual appropriations. Other related actuarial assumptions and methodologies not listed in this policy are reported in annual valuations, the most recent experience study or resolutions adopted by the board.

Also, the board may provide options for funding the Retirement Annuity Trust that could accelerate the paying of its unfunded liability ahead of the amortization schedule and reduce costs for the state thereafter to the normal cost.

This policy is in keeping with the board's direction for the Investment Committee to continue investing for maximum returns within the parameters of prudent risk.

This policy will be reviewed regularly and amended or revised as necessary.

BACKGROUND

The level of benefits and funding for teachers' pension and health care are mandated in law by the General Assembly. Also, state law requires that the board, as fiduciary, adopt reasonable actuarial assumptions based upon the advice of a qualified independent actuary and other professionals. Additionally, state law mandates that actuarial assumptions be set using rigorous and transparent processes that adhere to recognized actuarial and financial standards. These processes reflect national best practices, including the Government Finance Officers Association's best practice guidelines for valuations, experience studies and actuarial audits.

TRS evaluates actuarial assumptions (demographic and economic) each year during the actuarial valuation. Several other regular reviews are conducted as well. The return assumptions are reviewed annually by the board's Investment Committee as it evaluates asset allocation. Every five years, the actuary conducts an experience investigation and recommends to the board adjustments to assumptions based upon past trends, current behavior and forecasted experience. TRS also conducts an actuarial audit (an audit of the actuary) at least every 10 years to ensure that assumptions are reasonable and appropriately reflect the cost of the plans. In the investment context, TRS conducts an asset liability modeling study at least every five years — and more often if material changes warrant an updated study. The annual valuation determines the additional required employer contribution that is included in TRS's biennial budget requests.

The amount that the state owes for benefits consists of two components, normal cost and amortization of unfunded liability. The normal cost is included in the statutory payroll contributions made by members, the state and employers. The amortization of the unfunded liability includes the balance of the statutory payroll contributions paid by the state and employers above amounts needed for the normal cost. In addition, TRS requests additional contributions necessary to amortize the unfunded liability. The funding for medical insurance is outlined by statute as a shared responsibility of employees, employers, retirees and the state.

State law requires, and the TRS board uses, a qualified independent actuary that follows the generally accepted actuarial standards of practice. Some factors considered by the actuary include the length of amortization periods; the projected pattern of cash flows; current and projected interest rates and rates of inflation; and historical and projected returns of the funds. The actuary focuses on a long investment horizon to promote cost stability, predictability and equity among current and future taxpayers.

1. Retirement Annuity Trust Appropriations

KRS 161.714 provides that the retirement benefits promised to members of TRS are “an inviolable contract of the Commonwealth.” To satisfy this solemn commitment, the Commonwealth of Kentucky (state) is required to pay annual retirement appropriations necessary to fund the benefit requirements of retirement system members. All employers participating in TRS are responsible for paying the fixed employer contribution rate set forth in state law. However, the state – as plan guarantor – solely is responsible for paying the additional annual retirement appropriations necessary to keep the retirement system actuarially sound and able to satisfy the contract with members to provide promised benefits under KRS 161.550.

Beginning in 2019, the state made its full actuarially determined contribution. Prior to that, from fiscal year 2009 through 2018, the state did not pay the full annual retirement appropriations necessary to prefund the benefit requirements of members of the retirement system. Over this period, primarily because of the failure to fund, the state's annual retirement appropriations grew.

Fiscal Year	Requested Minimum Additional Payment for Unfunded Liability	Appropriated
2009	\$ 60,499,800	\$ 0
2010	82,331,200	0
2011	121,457,000	0
2012	208,649,000	0
2013	260,980,000	0
2014	299,420,000	0
2015	386,400,000	0
2016	487,400,000	0
2017	520,372,000	498,537,600
2018	512,883,000	474,724,700
2019	553,597,000	553,597,000
2020	538,253,000	538,253,000
2021	551,092,000	551,092,000
2022	579,208,000	

(Source: TRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2019)

The board always has acted as required by state law and requested annual retirement appropriations payable by the state that would ensure that the state meets the contractual obligations to members.

Annual Retirement Appropriations Payable by the State

In each biennial budget request, the board will recommend annual retirement appropriations payable by the state to meet the benefit requirements of the members of the retirement system. The annual retirement appropriations payable by the state are the sum of the fixed employer contribution rate set by state law and the additional annual retirement appropriations necessary to fund the benefit requirements of members of the retirement system (KRS 161.550). The recommended additional annual retirement appropriations payable by the state are calculated by the board's actuary based upon the results of an annual valuation preceding the beginning of each biennium (KRS 161.400).

Calculation of Annual Retirement Appropriations Payable by the State

The board will present the actuarially determined annual retirement appropriations payable by the state, which if paid, are the minimum to meet the benefit requirements of the members of the retirement system, consistent with generally accepted actuarial principles. Based upon technical advice from the board's actuary, the board hereby adopts the following principles for calculating the recommended annual retirement appropriations payable by the state:

- A. Use the Entry Age Normal actuarial cost method;
- B. Use a five-year asset smoothing method;
- C. Use a 30-year closed period that began fiscal year 2014 to amortize the unfunded liability. This is calculated by the actuary as the minimum dollar amount for the

- state to pay each year, and the amount to be provided by the state shall not be less than the prior year's dollar amount until the plan reaches a funded ratio of 100%;
- D. Use a 20-year closed period to amortize new sources of unfunded liability (new sources of unfunded liability are the unfunded liability consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation); and
 - E. Reach a minimum funded ratio of 100% within the closed period adopted by the board.

Accelerated Funding Options

In recognition that the state may want to pay off the unfunded liability earlier than the closed amortization period and thereby reduce its costs long-term, the board may provide options for funding over and above the actuarially required minimum. The board will provide the analytical support showing the impact of each of these on the current costs and the potential savings.

2. Retiree Health Insurance Trust

State law provides for a retiree medical plan (KRS 161.675). Since July 1, 2010, retired teachers, active teachers, local school boards, universities and the state have paid contributions for funding the retiree medical plan in accordance with the Shared Responsibility Solution contained in HB 540 (2010 RS). The contributions mandated by Shared Responsibility will meet the benefit requirements of the members of the retirement system, consistent with generally accepted actuarial principles. Based upon technical advice from the board's actuary, the board hereby adopts the following principles concerning the retiree health insurance plan:

- A. Use the Entry Age Normal actuarial cost method;
- B. Use a five-year asset smoothing method;
- C. Use a 30-year closed period that began fiscal year 2011 to amortize the unfunded liability;
- D. Use a 20-year closed period to amortize, as a level percentage of pay, new sources of unfunded liability (new sources of unfunded liability are the unfunded liability consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation); and
- E. Reach a minimum funded ratio of 100% within the closed period adopted by the board.

3. Life Insurance Trust

State law provides for a life insurance plan for active and retired teachers (KRS 161.655). The life insurance plan is funded by employer contributions. Based upon technical advice from the board's actuary, the board hereby adopts the following principles concerning the life insurance plan:

- A. Use the Entry Age Normal actuarial cost method;
- B. Use a five-year asset smoothing method;
- C. Use a 30-year closed period that began fiscal year 2014, to amortize the unfunded liability;
- D. Use a 20-year closed period to amortize, as a level percentage of pay, new sources of unfunded liability (new sources of unfunded liability are the unfunded liability consisting of all benefit changes, assumption and method changes and experience gains and/or losses that have occurred since the previous valuation); and
- E. Reach a minimum funded ratio of 100% within the closed period adopted by the board.

Adopted December 16, 2013; amended December 9, 2015, September 19, 2016, September 18, 2017, November 14, 2017, September 16, 2019

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

FROM: Gary L. Harbin, CPA
Executive Secretary

DATE: September 21, 2020

SUBJECT: Executive Secretary's Observations and Comments

1. Trustee Education Program: 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 2019 through June 2020, trustees attended 237 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 role and satisfying their duties under law.

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

2. Annual Trustee Workshop: 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 has been scheduled tentatively for Monday, November 23, 2020.

3. GASB Statement Nos. 67 and 68: In June 2012, the 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.

There has been some concern as to how these new accounting standards apply to Kentucky school districts, particularly whether these new accounting standards would affect the budgets of the districts. In response, two important points should be noted.

First, as a critical reminder, GASB standards in general 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 payments toward the unfunded liability. As such, the responsibility for making employer contributions and addressing the 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 do 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 will not be 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 Comprehensive Annual Financial Report (CAFR) for the fiscal year ending June 30, 2019.

On June 5, 2020, TRS published the "GASB Statement No. 68 Report ... Prepared as of and for the year ended June 30, 2019" 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 CAFR for the fiscal year ending June 30, 2019.

On June 5, 2020, TRS published the "GASB Statement No. 75 Report ... Prepared as of and for the fiscal year ended June 30, 2019" 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. Chair Appoints Members to the Special Committee on Benefits and Funding: Chair Wright has appointed herself, as an active teacher trustee, and fellow trustees Treasurer Allison Ball and retired teacher Brenda McGown to serve on the committee. The committee will evaluate benefits and funding issues concerning TRS.

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

June 17, 2020	Attended EY's US Pension COVID-19 Response
June 24, 2020	Attended NCTR System Directors Roundtable
June 30, 2020	Attended KRTA Fall Workshop planning meeting
July 7, 2020	Attended PSHCR Update and Briefing
August 11, 2020	Meeting with Todd Asset Management
August 28, 2020	Presented to KRTA Fall Workshop
September 1, 2020	Attended Know Your Rx Coalition board meeting
September 9, 2020	Meeting with KEA president and executive director

6. Next Meeting: The next quarterly meeting of the board will be December 21, 2020.



Teachers' Retirement System of the State of Kentucky

Kentucky Retired Teachers Association Fall Workshops 2020

Gary L. Harbin, CPA
Executive Secretary

Do You Feel Like You're On A Sitcom?

2020 Mirrors '70s TV



TRS Has Its Own Version

Directors Daily Meeting



TRS Has Its Own Version

Directors Daily Meeting



Consistency



Consistency

Only the Faces and Technology Change



FURNISH INFORMATION TO VISITORS

HELP PLAN FOR THE FUTURE

ENROLL NEW MEMBERS



THIS IS WHAT WE DO



KEEP UP WITH THE STATUS
OF OUR MEMBERS

COLLECT INCOME ON INVESTED RESERVES



PAY MISCELLANEOUS CLAIMS, INSURANCE
BENEFITS AND OPERATING EXPENSES

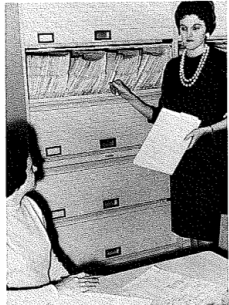


Consistency

Only the Faces and Technology Change



PREPARE ANNUAL ACCOUNT
STATEMENTS FOR MEMBERS



MAINTAIN INVESTMENT FILES
AND RECORDS



PROCESS MONTHLY ANNUITY PAYROLLS



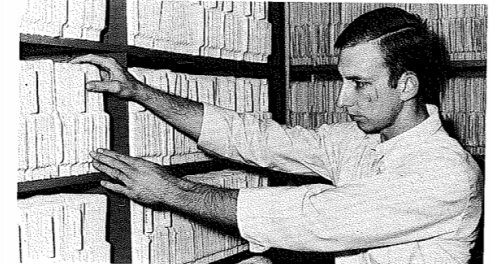
PROCESS APPLICATIONS FOR RETIREMENT



ANSWER REQUESTS FOR INFORMATION



ACCOUNT FOR MEMBER CONTRIBUTIONS



MAINTAIN TEACHERS' SERVICE RECORDS



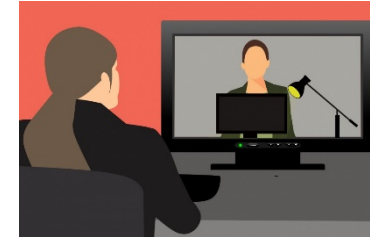
COUNSEL WITH RETIRED MEMBERS

TRS's Response to Coronavirus

Reaching out to members



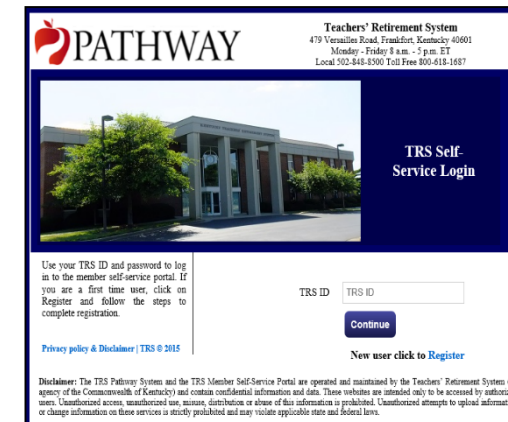
Website
video



Remote
counseling



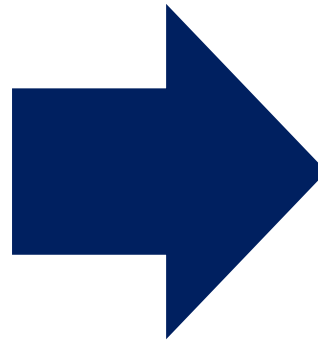
Seminars converted to webinars



Retirements handled normally
can be done through Pathway

TRS Response Updates

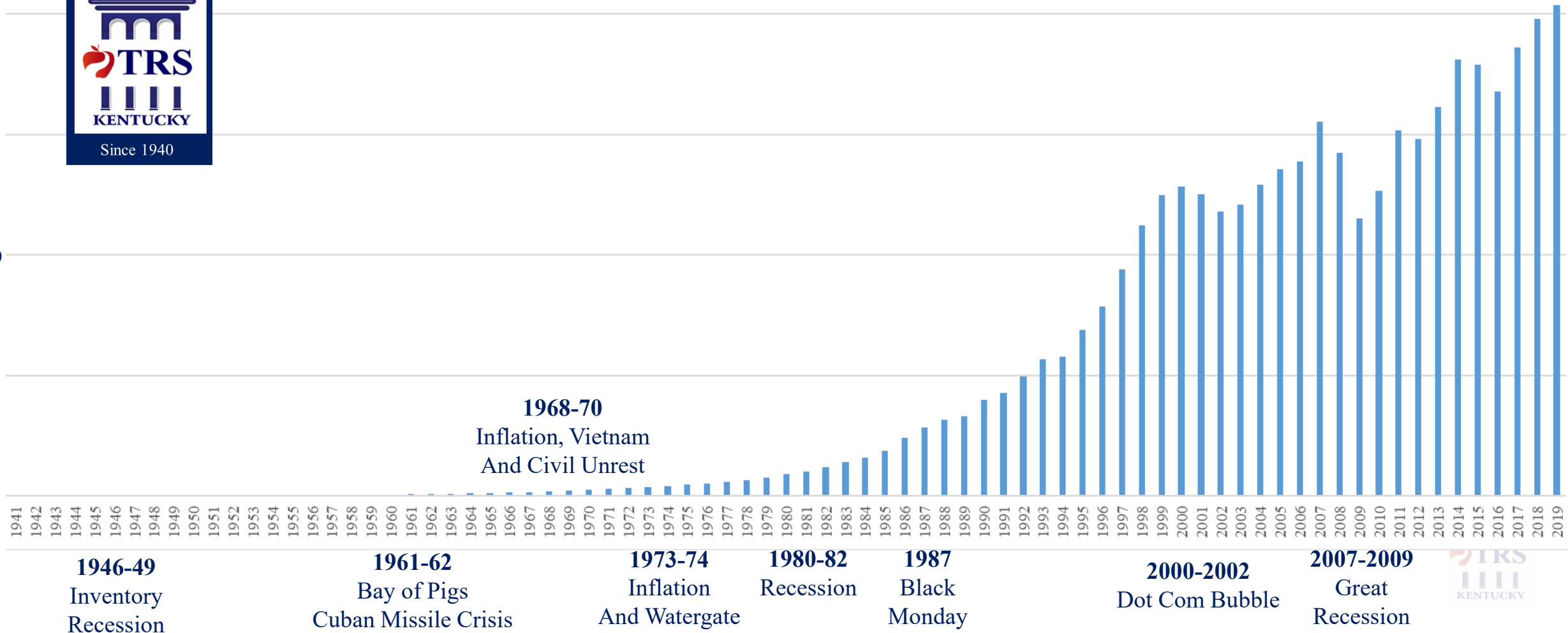
<https://trs.ky.gov/news/coronavirus-response-updates/>



Consistency

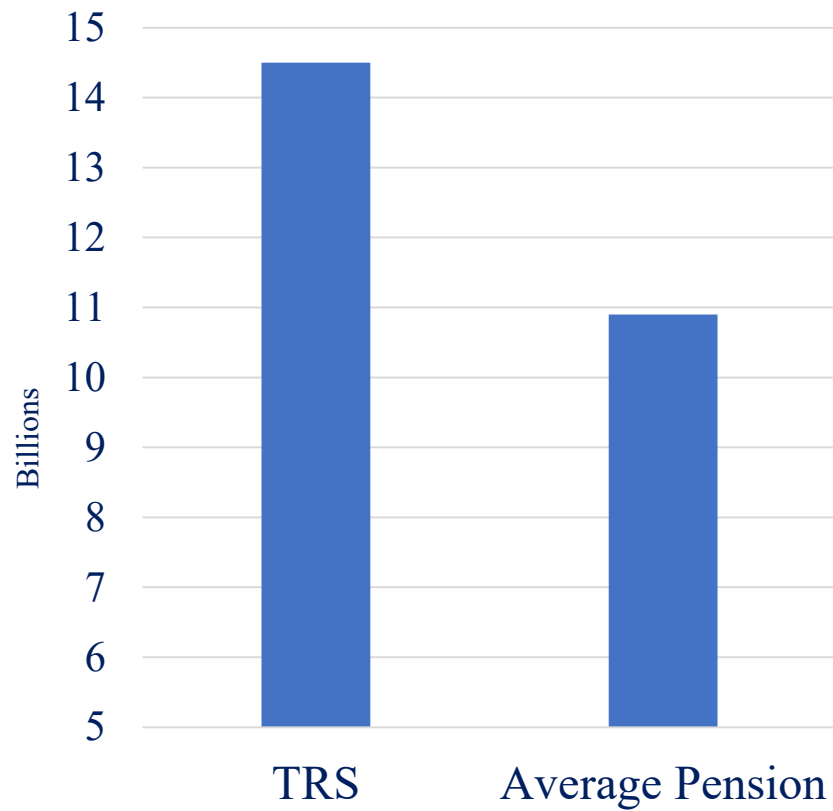


Dollars in billions



Investment Performance

Net Earnings 2008-2020



From 2008 to June 2020, TRS investment returns totaled a net \$14.5 billion, compared to the average plan's \$10.9 billion.

This outperformance generated \$3.6 billion to the benefit of Kentucky's teachers.

Investment Performance

Retirement Annuity Trust Preliminary Returns as of June 30, 2020 (unaudited)

	1-year	3-year	5-year	10-year	20-year
Gross	5.8%	7.48%	7.23%	9.59%	6.09%
<i>Benchmark</i>	4.23%	6.97%	7.21%	9.25%	N/A
<i>TRS Aon Rank</i>	Top 5%	Top 4%	Top 7%	Top 3%	N/A
Net	5.5%	7.18%	6.93%	9.34%	5.93%

30-year compounded gross return
7.98%

TRS Approach

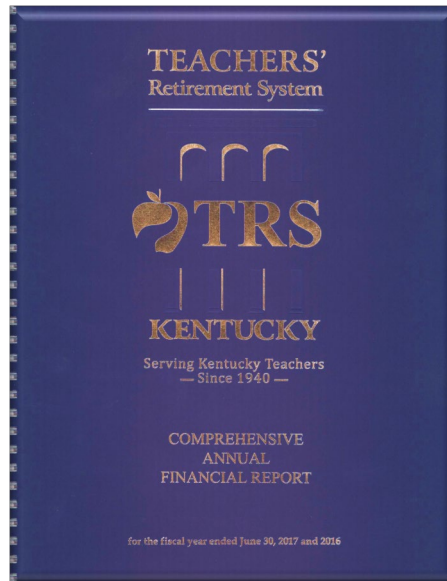
- TRS never has used placement agents.
- TRS has not used hedge funds.
- TRS has fiduciary duty in procurement.
- All fees disclosed in annual report and quarterly on website.

TRS Asset Allocation History

Asset Class	2004	2006	2008	2010	2012	2014	2016	2018	2021 Targets
Domestic Stocks	55.7%	59%	54.9%	46.3%	47.5%	44.3%	42.9%	41.3%	40%
International Stocks	0%	2.4%	9.1%	13.4%	15.6%	18.9%	19.2%	22.7%	22%
Total Stocks	55.7%	61.4%	64%	59.7%	63.1%	63.2%	62.1%	64%	62%
Fixed Income	33.8%	30.1%	30.6%	31.1%	23%	19.9%	17.1%	15.3%	15%
Cash	7.7%	5.7%	1.6%	1.7%	2.9%	2.3%	1.7%	1.2%	2%
Real Estate	2.8%	2.8%	3%	3.3%	4%	4.1%	5.6%	5.8%	7%
Alternatives	0%	0%	0.8%	1.7%	3%	3.6%	5.6%	6.5%	7%
Additional Categories	0%	0%	0%	2.5%	4%	6.9%	7.9%	7.2%	7%

Transparent Low Fees & Investment Costs

From the most recent TRS annual report



FY 2019
Total \$61 M
30/100 of 1%
of
Pension Assets

INVESTMENT SECTION

Schedule of Contracted and Administrative Investment Expenses
Retirement Annuity Trust
June 30, 2015

INVESTMENT COUNSELOR FEES

EQUITY MANAGERS

ALTERNATIVE INVESTMENTS continued...

L.P.	(210,330)
L.P.	157,271
ers Fund XIV, L.P.	299,845
ers Fund XV, L.P.	300,000
ers Fund VII, L.P.	225,680
ers Fund VIII, L.P.	522,719
Michigan	859,775
Wisconsin	64,734
	577,811
Fund X, L.P.	817,555
Fund XI, L.P.	8,090
Capital Fund III, L.P.	343,776
III, L.P.	265,402
IV, L.P.	31,635
III, L.P.	150,512
	857,565
gy and	127,654
L.P.	
Lower Fund V, L.P.	221,925
Managers	\$ 11,478,820

OPERATIONAL EXPENSES

Commission	335,800
	\$ 335,800
	358,850
	55,262
	34,134
	\$ 448,246
	84,131
	\$ 84,131
and Operational	\$ 2,639,773
scription	
	\$ 2,639,773
	\$ 44,892,486

Board of Trustees

Fiduciaries of TRS



**ALISON
WRIGHT**

Chair, Georgetown



**HOLLIS
GRITTON**

Vice Chair, Union



**BILL
ALVERSON**

Paris



**ALLISON
BALL**

State Treasurer



**JOHN
BOARDMAN**

Lexington



**KEVIN
BROWN**

*Interim Education
Commissioner*



**FRANK
COLLECCHIA**

Louisville



**BRENDA
MCGOWN**

Bowling Green



**LYNN
PATTERSON, Ed.D.**

Murray



**LAURA
SCHNEIDER**

Walton



**JOSH
UNDERWOOD**

Tollesboro

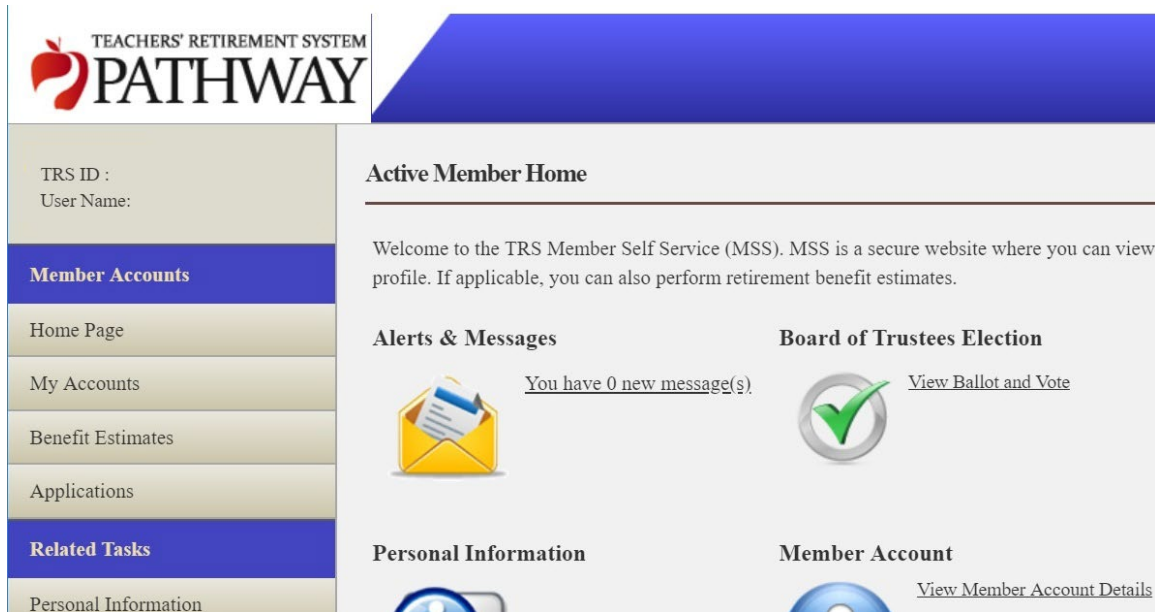
TRS Expenses vs. Other Systems

As of June 30, 2019

	Percentage of Liabilities
TRS Kentucky	0.0362%
Louisiana Teachers	0.0426%
Kansas Public Employees	0.0456%
New Mexico Public Employees	0.0613%
Ohio Teachers Retirement System	0.0664%
Kentucky Retirement Systems	0.0774%
Georgia Employees	0.0806%
Indiana Public Employees	0.1186%

Trustee Elections Each Spring

April



TEACHERS' RETIREMENT SYSTEM
PATHWAY

TRS ID :
User Name:

Member Accounts

- Home Page
- My Accounts
- Benefit Estimates
- Applications


Related Tasks

- Personal Information


Active Member Home

Welcome to the TRS Member Self Service (MSS). MSS is a secure website where you can view profile. If applicable, you can also perform retirement benefit estimates.


Alerts & Messages

 [You have 0 new message\(s\).](#)


Board of Trustees Election

 [View Ballot and Vote](#)

Personal Information




Member Account

 [View Member Account Details](#)

May

Please complete the ballot below, tear on perforation and mail. NO POSTAGE NECESSARY.

TEACHERS' Retirement System

TRRS
KENTUCKY

This year the membership will be selecting one lay trustee and one active teacher trustee.

Please vote for ONLY ONE Lay Trustee and ONLY ONE Active Teacher Trustee.

An extra line is provided if you prefer to vote for a write-in candidate.

OFFICIAL BALLOT
Election of Board of Trustees Members per KRS 161.260
Mail no later than May 31, 2015

Candidates for Lay Trustee

- ☐ 1. _____
- ☐ 2. _____
- ☐ 3. _____

Candidates for Active Teacher Trustee

- ☐ 1. _____
- ☐ 2. _____
- ☐ 3. _____

KTRS OFFICIAL BALLOT NUMBER: 12345

All contributing members and retirees have the privilege to vote.





Member Benefits

Teachers' & State Contributions Invested To Provide Lifetime Benefit

For a member living the average life expectancy about 70% of lifetime benefits come from investment earnings.

Average service retirement age is 59.

Average life expectancy is about 80.

Consistency

Number of founding members of TRS receiving a benefit as of June who were members when the doors opened July 1, 1940



10

Importance of Investment Income

Schedule of Funds Available for Retirement Benefits

In billions

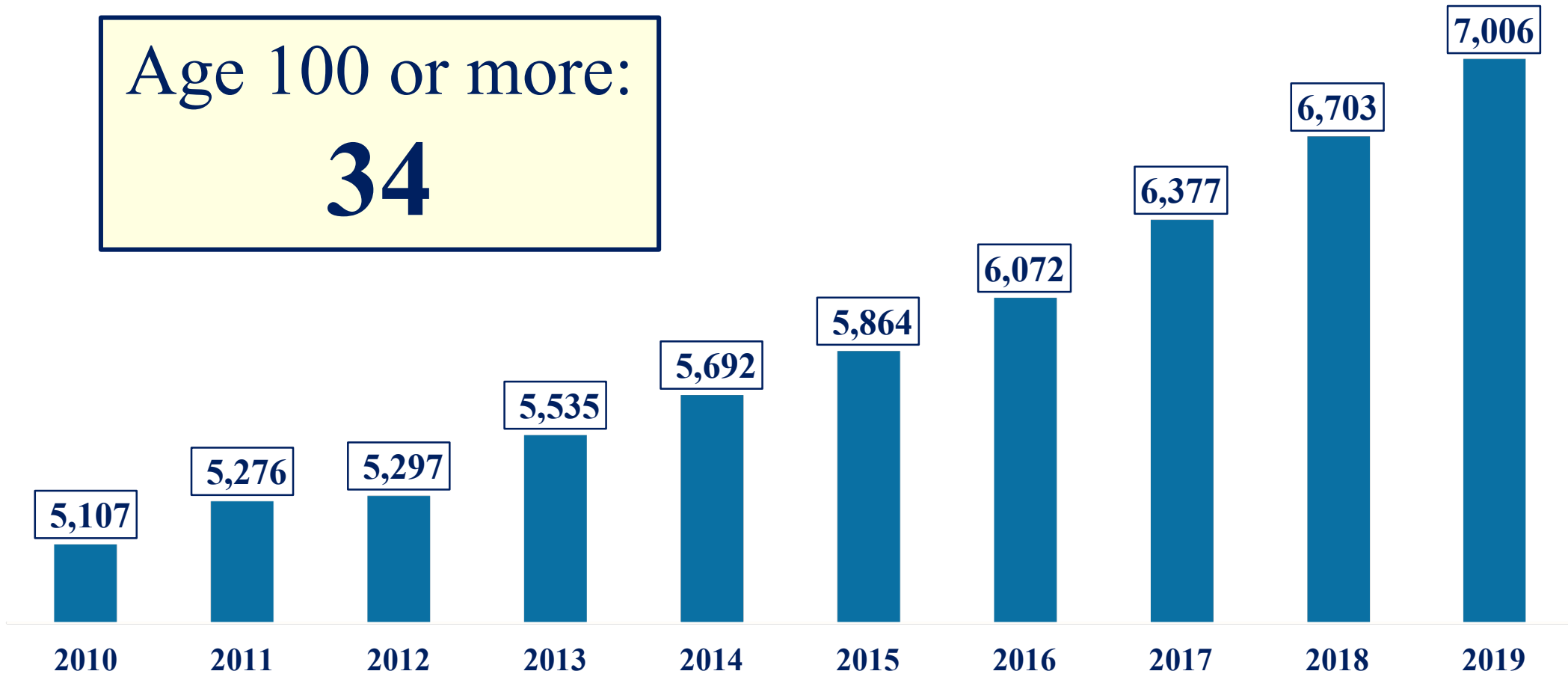
Beginning Balance as of July 1, 1985	\$ 1.8
Member & Other Contributions	7.6
Employer Contributions	14.6
Investment Income	27.5
Benefit Payments & Refunds	(30.9)
Administrative Expenses	(0.2)
Ending Balance as of June 30, 2019	\$20.4



TRS Benefits Protect At-Risk Population

Retirees over 80 as of Dec. 31

Age 100 or more:
34



TRS Benefits Protect At-Risk Population

Member Recipients	
Females	73%
Males	27%

Who Are TRS Members?

171 school districts



KCTCS



17 Department of Education agencies



Five universities



- 95% of TRS members employed by non-university and benefit *replaces* Social Security
- 5% employed by university and benefit *supplements* Social Security

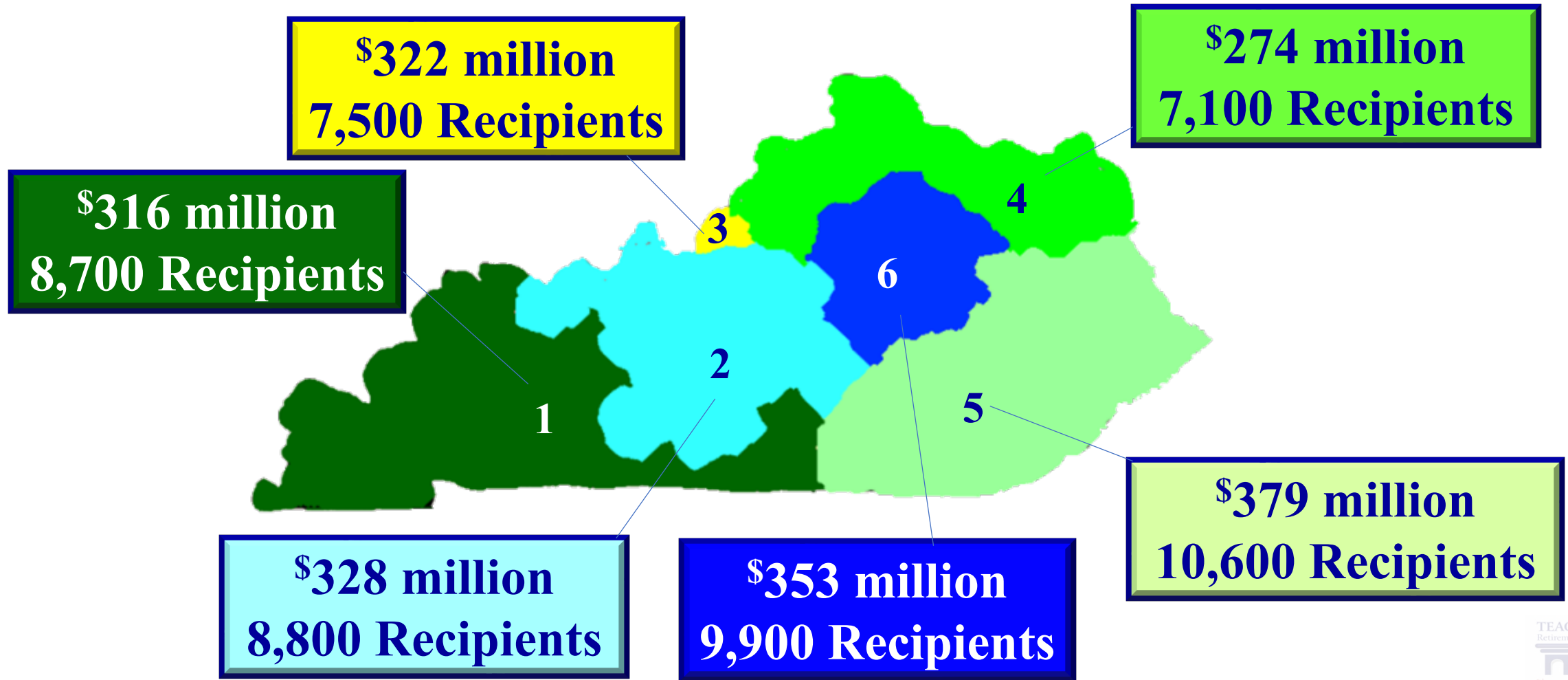
Retired Teachers' Economic Impact Across Kentucky



- TRS pays retired teachers:
 - \$203.5 million in retirement annuity benefits (*July 2020*)
 - \$17.1 million in medical benefits (*monthly average*)
- 91% of TRS pension benefits stay in Kentucky
- 88% of TRS retirees live in Kentucky
- \$2 billion a year paid into Kentucky's economy because of pension benefits

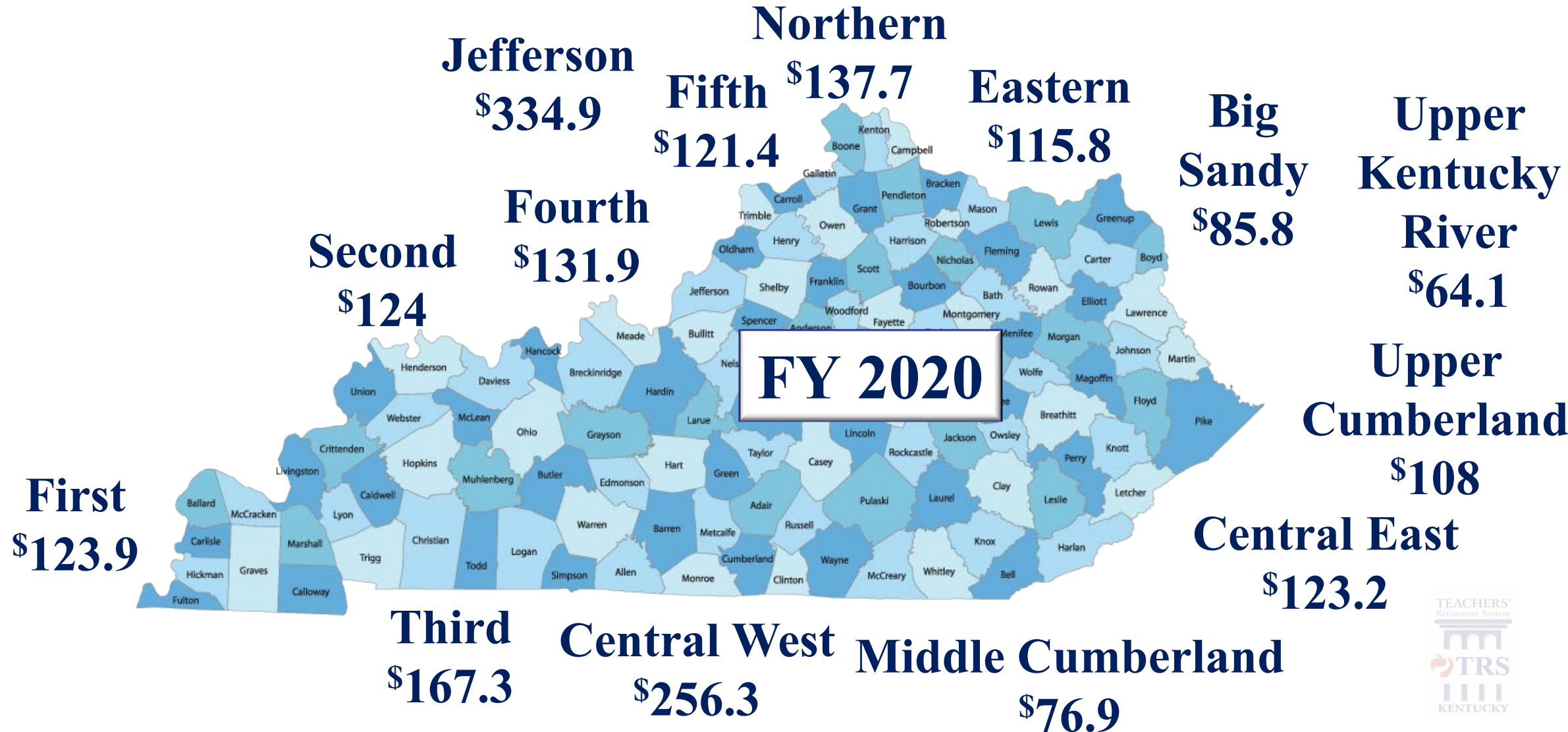
Retired Teachers' Impact In Kentucky

Pension benefits for FY 2019-20 by congressional district (estimated)



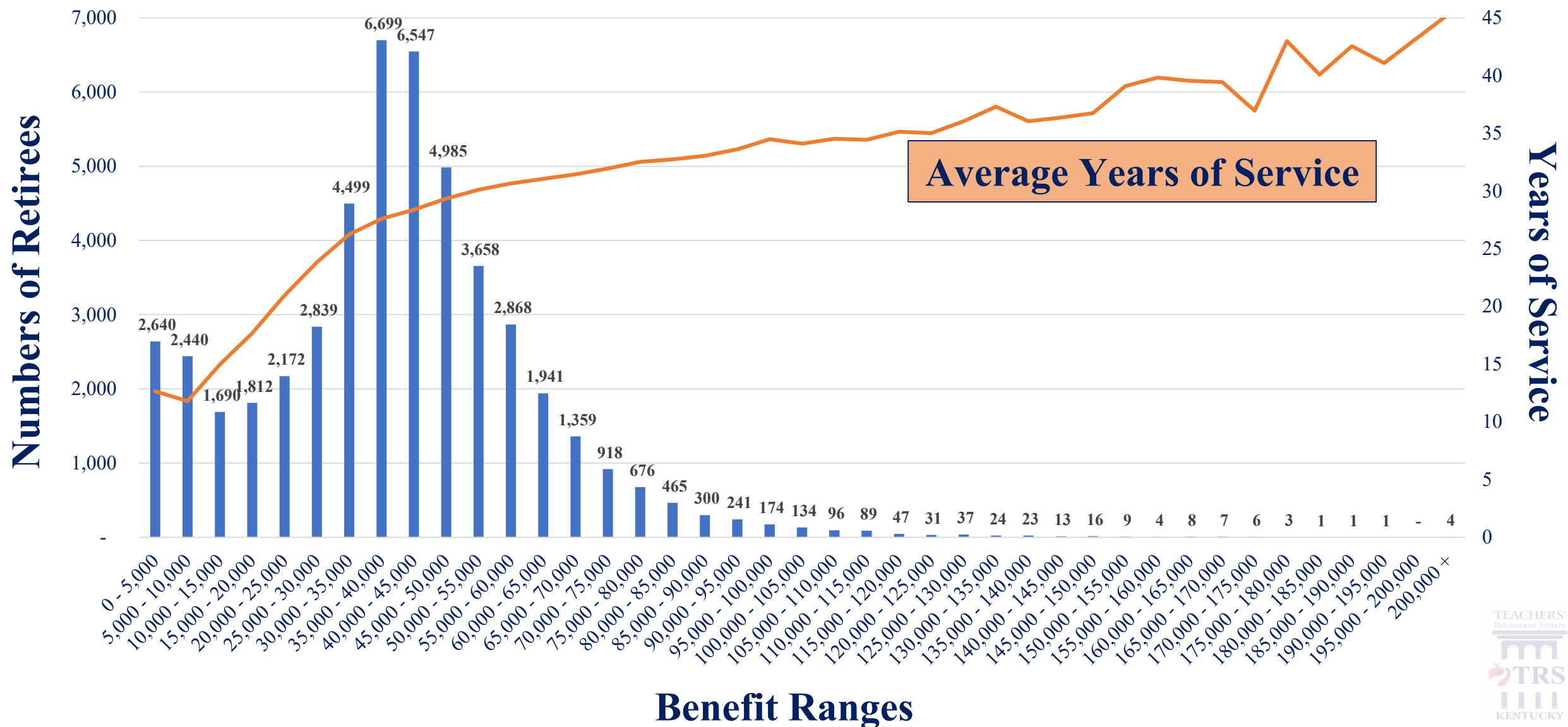
Retired Teachers' Impact In Kentucky

Pension benefits (in millions) by KRTA district



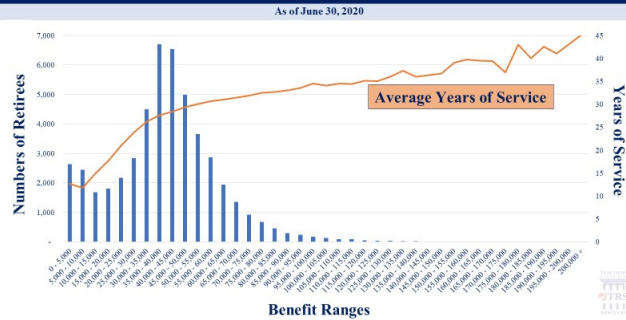
Annualized Gross Benefits of Service Retirees

As of June 30, 2020



What the Chart Shows

Annualized Gross Benefits of Service Retirees

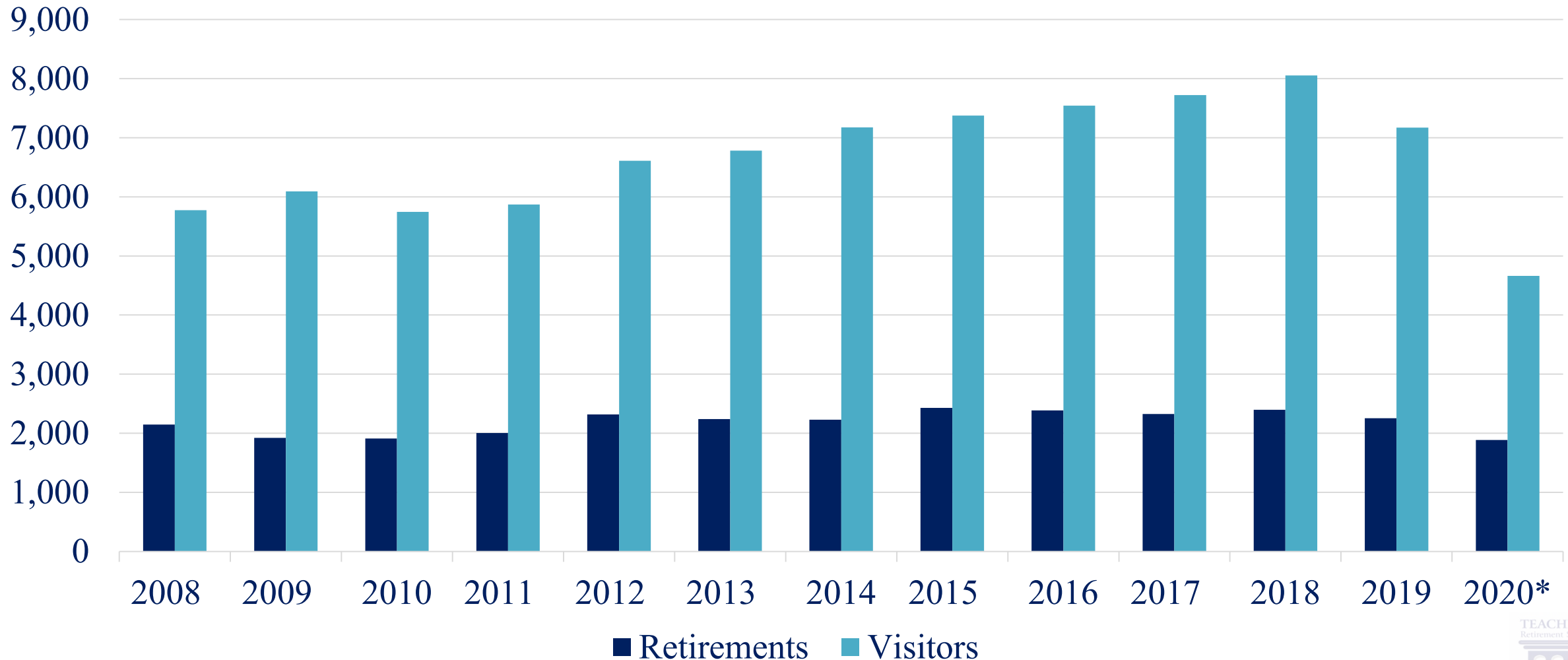


- 50% of retirees received \$40,000 or less in Fiscal Year 2020
- 87% of retired teachers receive \$60,000 or less
- 1% of retirees receive more than \$100,000
- Careers of retirees receiving \$20,000 to \$40,000 averaged 26 years
- People receiving higher pensions also worked longer

Remember: TRS replaces Social Security

Note: Excludes disability retirement payments

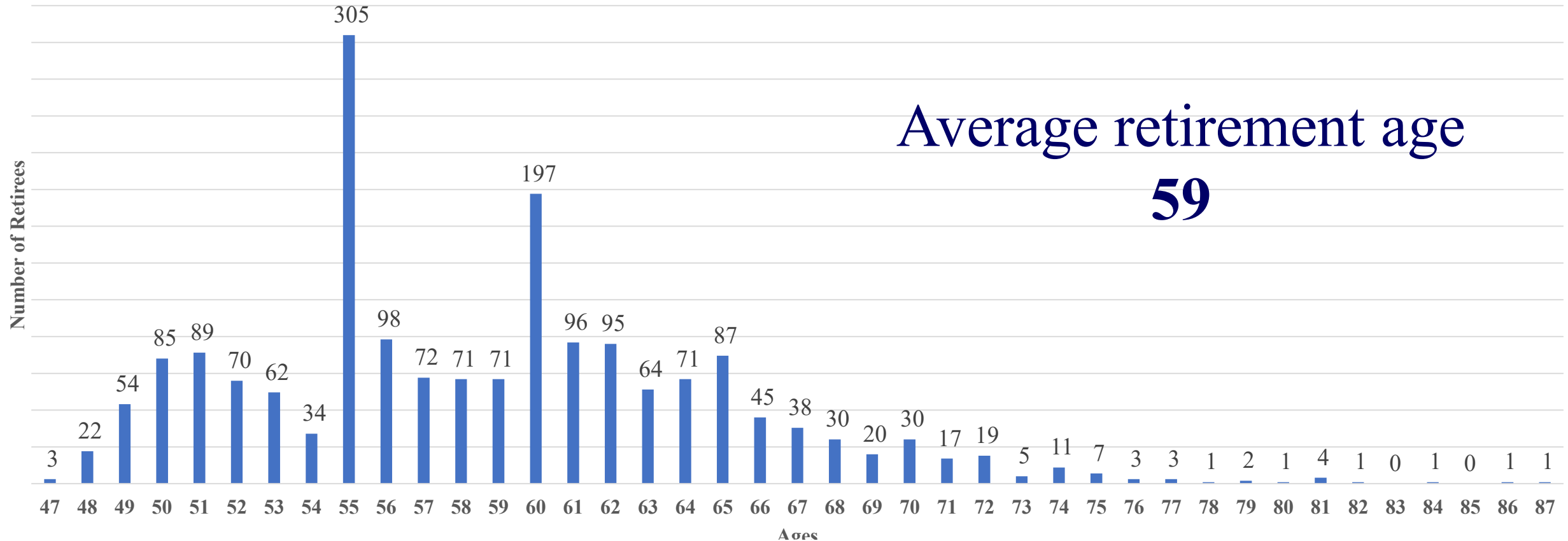
Retirements and Visitors



*Unaudited

Number of Retirees by Age at Retirement

Fiscal Year 2020: 1,186 Service Retirements



Average retirement age
59

- Only 4% retire before age 50
- More than 4 times as many people retire at 65 & over than under age 50
- Average career teacher retiring in FY 2020 worked more than 29 years



Retiree Health Insurance

Two Plans for TRS Health Benefits

KEHP **Kentucky** **Employees'** **Health Plan**

- Under 65 and not Medicare-eligible
- Same fund as active teachers and state employees
- Coverage options

MEHP **Medicare** **Eligible Health** **Plan**

- Medicare-eligible or 65 & over
- Exclusively TRS members
- One plan

10 Years for Shared Responsibility

A shared solution that provides permanent funding for retiree health care.



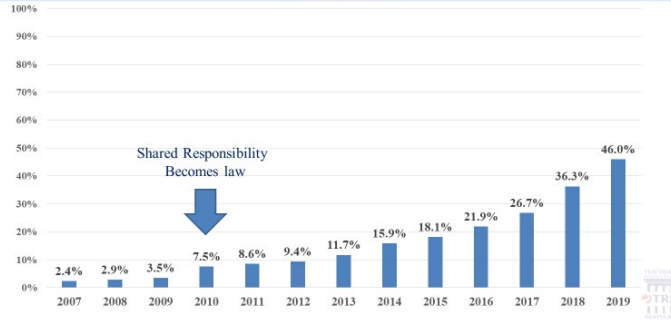
TRS Health Insurance

Funded Status



TRS Health Insurance

Funded Status



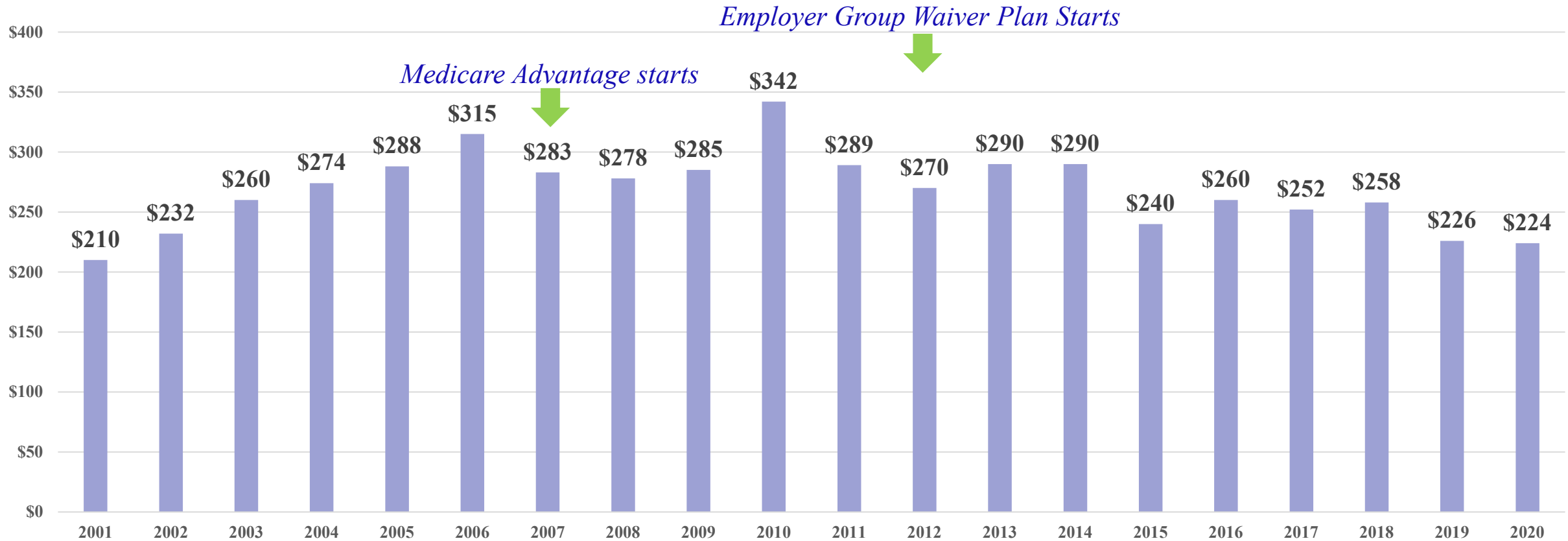
Funded Status Details

MEHP

- 62% funded
- Projected to be fully funded in 5 years

KEHP

- Prefunding will start when over-65 coverage is fully funded
- State's \$70 million for FY 2020 funded through surplus



Premiums Held Almost Constant For 20 Years

Genetic testing wellness program receives national attention



TRS Retiree Health Care Director Jane Gilbert speaks about Personalized Medicine during November conference at Harvard Medical School.

Nationally



**Percentage of medications
taken by patients that are
ineffective**



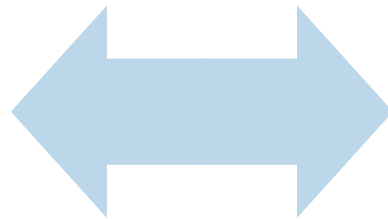
**Where adverse drug
reactions ranks as a leading
cause of death**



TRS Solution: Personalized Medicine Partnership



You
Your Doctor
Your Pharmacist



How it Can Help

Your DNA matters

Using DNA to see what drugs will be safe and effective — Pharmacogenomics

Steps

Collect genetic information

Empower pharmacists

Communicate the Medication Action Plan

Early Results — Data

28% resulted in medication change recommendation due to DNA test

In first 16 months ...

14% *reduction* in spending for those involved

3.2% *increase* in spending for control group not involved

Other Metrics of Success

- 87% Medication change recommendations accepted by prescriber
- 22% reduction in hospitalizations
- 27% reduction in slip and falls

Early Results — Real Story

- TRS member was prescribed a blood thinner after having a stroke
- TRS member had a mini-stroke while on that blood thinner
- TRS member took the DNA test and results showed the member was a slow metabolizer of the blood thinner and it did not interact well with their stomach medicine
- The Know Your Rx pharmacist worked with the TRS member and doctor to change to a different blood thinner
- The member is doing well

Member Feedback

70% said program valuable

“It’s been years since I’ve seen something come through to make me stop and say, ‘Wow! This is a great idea.’”

“This is very much needed!”

“I did the testing and thank goodness I did.”

“I am so excited about this benefit!”

“This is wonderful! It's nice to see TRS participating in new and more exciting things!”

“I have far more energy now.”

“This came at the best time!”

“This is what health care should be.”



What's Ahead

Actuarial Status

As of June 30, 2019



Dollars in billions

	<u>Assets</u>	<u>Liabilities</u>	<u>Unfunded</u>	<u>Percent</u>
Pension	\$ 20.2	\$ 34.7	\$ 14.5	58.1%

2020 Legislative Session Update

- Full funding for pension and health insurance for 2020-21
- Fifth-straight year for full funding (or nearly full funding)
- Budget for 2021-22 expected to be decided in 2021

Possible 2021 Legislation

- Budget for 2021-22
- Potential bills to create new tier for new teachers
- Changes for current teachers outside Inviolable Contract
- TRS housekeeping bill

TRS News & Information



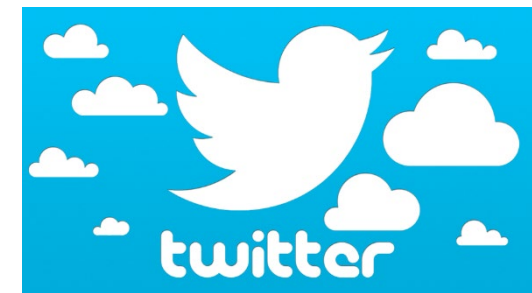
<https://trs.ky.gov>



<https://mss.trs.ky.gov/>



facebook.com/KyTeachersRS



[@KyTeachersRS](https://twitter.com/KyTeachersRS)



Our Members Come First!

800-618-1687

**8 a.m. – 5 p.m. ET
Monday – Friday**

info@trs.ky.gov
<https://trs.ky.gov>

Protecting & Preserving Teachers' Retirement Benefits