

TEACHERS' RETIREMENT SYSTEM OF KENTUCKY

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Serving Kentucky Teachers Since 1940

GARY L. HARBIN, CPA
Executive Secretary
(502) 848-8500

Regular Quarterly Meeting of the Board of Trustees
of the Teachers' Retirement System of Kentucky

A G E N D A

March 20, 2017, 12:30 p.m.

Board Called to Order
Roll Call

1. Reports for Consent

1.1. Consideration/Approval of Minutes

- 1.1.1. Regular Quarterly Meeting of the Board of Trustees held December 19, 2016
- 1.1.2. Special Meeting of the Personnel Committee held November 21, 2016
- 1.1.3. Special Meeting of the Personnel Committee held December 19, 2016
- 1.1.4. Special Meeting of the Scholarship Committee held December 19, 2016
- 1.1.5. Special Meeting of the Legislative Committee held December 19, 2016

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. Legislative Report

4. Report of the Governance and Audit Committee

5. Executive Secretary's Observations and Comments

General Discussion

Adjournment

The meeting will take place in the Boardroom at the offices of the Teachers' Retirement System of Kentucky, 479 Versailles Road, Frankfort, Kentucky.

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

FROM: Gary L. Harbin, CPA

DATE: March 20, 2017

SUBJECT: Reports for Consent

1.1. Consideration/Approval of Minutes

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- 1.1.5. Special Meeting of the Legislative Committee held December 19, 2016

1.2. Applications for Retirement and Annuity

The lists of members who retired in December 2016, January and February 2017 will be available for examination at the meeting. Attached is a summary of the particular payments and a comparison to the same period last year. Initial retirements for the period included 282 retirees with monthly payments totaling \$783,906.32.

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

During the same period last year, there were 289 retirements with monthly payments totaling \$791,299.69.

1.3. Survivor Benefits

The list of persons qualifying for survivor benefit payments for the quarter October 1, 2016 through December 31, 2016 will be available for examination at the meeting. During the period, there were 9 survivor benefits with a total monthly payment of \$5,324.14.

Recommendation: The Board is requested to approve the survivor benefit payments for the period October 1, 2016 through December 31, 2016 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 October 1, 2016 through December 31, 2016 will be available for examination at the meeting. There were 6 payments to the estates or beneficiaries of active teachers and 214 payments to the estates or beneficiaries of retired teachers for total payments of \$1,082,000.

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

During the same quarter in 2015, there were 232 payments in the amount of \$1,139,000.

1.5. Refunds

The report of refunds for the quarter ended December 31, 2016 is attached. There were 831 refunds for the quarter October 1, 2016 through December 31, 2016, and the amount refunded was \$7,174,644.10. The refunds are for the following categories:

Regular withdrawals	793	\$6,634,859.95
Deaths	<u>38</u>	<u>\$ 539,784.15</u>
Totals	831	\$7,174,644.10

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

During the same quarter in 2015 there were 655 refunds totaling \$7,091,113.15.

1.6. Interim Financial Statements

Attached are the Interim Financial Statements for the quarter ended December 31, 2016.

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
2016-2017

	December	January	February	Total	Same Period 2016
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>8</i> \$21,550.48	<i>8</i> \$18,900.46	<i>9</i> \$24,465.96	<i>25</i> \$64,916.90	<i>35</i> \$93,175.15
Service Retirement	<i>40</i> \$91,546.11	<i>159</i> \$471,531.35	<i>57</i> \$150,782.35	<i>256</i> \$713,859.81	<i>252</i> \$693,803.35
Beneficiary of Member Eligible to Retire	<i>0</i> \$0.00	<i>1</i> \$5,129.61	<i>0</i> \$0.00	<i>1</i> \$5,129.61	<i>2</i> \$4,321.19
TOTALS	<i>48</i> \$113,096.59	<i>168</i> \$495,561.42	<i>66</i> \$175,248.31	<i>282</i> \$783,906.32	<i>289</i> \$791,299.69

Reports for Consent
Member Account Refunds
For the period October 2016 - December 2016

Active Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
October	290	1,506,153.19	366,746.62	1,190,805.73	3,063,705.54
November	218	850,469.65	212,604.18	624,082.57	1,687,156.40
December	286	973,068.48	241,205.21	669,724.32	1,883,998.01
Total	793				6,634,859.95

Deceased Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
October	14	111,789.67	25,634.92	4,775.75	144,200.34
November	12	48,920.61	11,992.84	105,452.98	170,366.43
December	12	16,181.02	206.92	206,829.44	225,217.38
Total	38				539,784.15

Total Refunds	Count	Net Refund	Taxes Withheld	Rollovers	Total
October	304	1,617,942.86	392,381.54	1,195,581.48	3,207,905.88
November	230	899,390.26	224,597.02	729,535.55	1,857,522.83
December	298	989,249.50	241,412.13	876,553.76	2,109,215.39
Total	831				7,174,644.10

TEACHERS' RETIREMENT SYSTEM

OF THE STATE OF KENTUCKY



INTERIM FINANCIAL STATEMENTS

QUARTER ENDED DECEMBER 31, 2016
(UNAUDITED)

Statements of Plan Net Assets
as of December 31, 2016 and 2015
 (Book Basis - Unadjusted)

		Defined Benefit Plan		Health Insurance Plans		Life Insurance Plan		Other Funds		TOTAL	
		2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
ASSETS											
Cash		\$ 91,281,431	\$ 149,921,096	\$ 40,494,351	\$ 28,945,091	\$ -	\$ 259,449	\$ 110,092	\$ 33,795	\$ 131,885,874	\$ 179,159,431
Receivables											
	Contributions	34,664,070	43,498,115	21,525,458	7,531,532	95,285	67,161			56,284,813	51,096,808
	State of Kentucky	16,272,123	26,885,159	1,359,808	2,580,839	54,392	61,789			17,686,323	29,527,787
	Investment Income	39,619,872	40,683,260	1,333,953	1,289,669	1,090,402	999,217	2,417	2,434	42,046,644	42,974,580
	Investment Sales Receivable	14,485,148	14,730,288	541,374	242,149	-	-			15,026,522	14,972,437
	Installment Account Receivable	507,829	515,291							507,829	515,291
	Other Receivables	81,004	96,208	33,476,310	3,864					33,557,314	100,072
	Due from Other Funds	-	4,248,808							-	4,248,808
	Total Receivables	105,630,046	130,657,129	58,236,903	11,648,053	1,240,079	1,128,167	2,417	2,434	165,109,445	143,435,783
Investments at Book Value											
	Short Term Investments	470,805,612	439,209,800	21,262,040	53,412,890	4,856,602	2,209,382	411,801	425,203	497,336,055	495,257,275
	Bonds and Mortgages	2,498,595,312	2,724,738,471	61,044,247	53,523,301	78,343,534	81,482,121	199,485	199,485	2,638,182,578	2,859,943,378
	Stocks	8,202,697,396	8,253,639,069	312,634,713	277,006,391			185,574	185,574	8,515,517,683	8,530,831,034
	Alternative Investments	814,364,491	727,730,846	29,002,571	13,710,454					843,367,062	741,441,300
	Real Estate	837,411,418	797,842,621	26,691,926	17,391,946					864,103,344	815,234,567
	Additional Categories	1,366,897,363	1,268,297,330	155,381,651	134,122,656					1,522,279,014	1,402,419,986
	Total Investments	14,190,771,592	14,211,458,137	606,017,148	549,167,638	83,200,136	83,691,503	796,860	810,262	14,880,785,736	14,845,127,540
	Capital Assets	16,973,670	14,906,438							16,973,670	14,906,438
	(net of accumulated depreciation)										
	Total Assets	14,404,656,739	14,506,942,800	704,748,402	589,760,782	84,440,215	85,079,119	909,369	846,491	15,194,754,725	15,182,629,192
LIABILITIES											
Liabilities											
	Accounts Payable	1,166,764	-	19,811	-					1,186,575	-
	Contributions Not Posted	26,300,412	12,035,400	-	15,225,685					26,300,412	27,261,085
	Investment Purchases Payable	16,453,045	7,532,283	1,652,745	702,020			-	-	18,105,790	8,234,303
	Investment Fees Payable	11,447,198	10,975,711	709,100	328,327			-	-	12,156,298	11,304,038
	Due to Other Funds	-	-	-	4,222,895	-	25,307	-	606	-	4,248,808
	Revenues Collected in Advance	-	-	2,044,472	4,899,365					2,044,472	4,899,365
	Total Liabilities	55,367,419	30,543,394	4,426,128	25,378,292	-	25,307	-	606	59,793,547	55,947,599
NET ASSETS HELD IN TRUST											
FOR PENSION BENEFITS		\$ 14,349,289,320	\$ 14,476,399,406	\$ 700,322,274	\$ 564,382,490	\$ 84,440,215	\$ 85,053,812	\$ 909,369	\$ 845,885	\$ 15,134,961,178	\$ 15,126,681,593

Statements of Changes in Plan Net Assets
For the Six Months Ended December 31, 2016 and 2015
 (Book Basis - Unadjusted)

	Defined Benefit Plan		Medical Insurance Plan		Life Insurance Plan		Other Funds		TOTAL	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
ADDITIONS										
Contributions										
Employer- State Paid	\$ 464,595,046	\$ 223,199,164	\$ 32,850,257	\$ 40,472,652	\$ 377,043	\$ 388,183	\$ -	\$ -	\$ 497,822,346	\$ 264,059,999
Employer- LSD, Other	37,936,026	47,152,084	45,689,398	39,291,637	81,077	58,016	220,001	-	83,926,502	86,501,737
Member- Active	137,072,087	157,801,718	55,933,876	52,768,554					193,005,963	210,570,272
Member- Retired			28,849,477	28,049,342					28,849,477	28,049,342
Recovery Income			9,801,480	10,880,911					9,801,480	10,880,911
Total Contribution	639,603,159	428,152,966	173,124,488	171,463,096	458,120	446,199	220,001	-	813,405,768	600,062,261
Investment Income (at book value)										
Net Gain/(Loss) on Investment Sales	276,995,646	170,349,275	9,892,587	(4,173,107)	(7,778)	20,072	-	-	286,880,455	166,196,240
Interest	75,072,975	92,164,581	2,253,980	3,885,697	1,508,806	1,524,037	5,167	4,707	78,840,928	97,579,022
Dividends	89,287,050	106,851,362	1,329,288	312,868			2,493	2,498	90,618,831	107,166,728
Rental Income, Net	15,026,522	13,799,849							15,026,522	13,799,849
Securities Lending, Net	731,948	1,126,275			1,001	2,414	14	198	732,963	1,128,887
Gross Investment Income	457,114,141	384,291,342	13,475,855	25,458	1,502,029	1,546,523	7,674	7,403	472,099,699	385,870,726
Less Investment Expense	(25,493,230)	(21,393,496)	(1,543,222)	(985,274)					(27,036,452)	(22,378,770)
Net Investment Income	431,620,911	362,897,846	11,932,633	(959,816)	1,502,029	1,546,523	7,674	7,403	445,063,247	363,491,956
Total Additions	1,071,224,070	791,050,812	185,057,121	170,503,280	1,960,149	1,992,722	227,675	7,403	1,258,469,015	963,554,217
DEDUCTIONS										
Benefits	957,968,429	914,456,297			2,549,120	2,475,489	116,194	39,358	960,633,743	916,971,144
Refunds of Contributions	16,110,806	18,148,714							16,110,806	18,148,714
Under 65 Insurance Expenses			62,248,427	65,249,924					62,248,427	65,249,924
Over 65 Insurance Expenses			86,440,817	73,504,062					86,440,817	73,504,062
Administrative Expense	7,265,814	7,265,698	-	-	-	-	-	-	7,265,814	7,265,698
Total Deductions	981,345,049	939,870,709	148,689,244	138,753,986	2,549,120	2,475,489	116,194	39,358	1,132,699,607	1,081,139,542
Net Increase (Decrease)	89,879,021	(148,819,897)	36,367,877	31,749,294	(588,971)	(482,767)	111,481	(31,955)	125,769,408	(117,585,325)
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS										
Beginning of year	14,259,410,299	14,625,219,303	663,954,397	532,633,196	85,029,186	85,536,579	797,888	877,840	15,009,191,770	15,244,266,918
Ending of period	\$ 14,349,289,320	\$ 14,476,399,406	\$ 700,322,274	\$ 564,382,490	\$ 84,440,215	\$ 85,053,812	\$ 909,369	\$ 845,885	\$ 15,134,961,178	\$ 15,126,681,593

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

FROM: Gary L. Harbin, CPA

DATE: March 20, 2017

SUBJECT: Report of the Investment Committee

1. Investment Committee Meeting and Actions: The investments approved at the February 23, 2017 Investment Committee meeting are as follows: \$50 million from the Retirement Annuity Trust Fund and \$10 million from the Medical Insurance Trust Fund to the Apax Digital Fund. \$50 million from the Retirement Annuity Trust Fund and \$10 million from the Medical Insurance Trust Fund to Carlyle Realty Partners VIII, L.P. Additionally, outside managers JP Maritime Fund, Todd Asset Management and UBS Asset Management reported to the committee on their respective portfolios.

2. Purchases and Disposals: The Report of the Investment Committee for the quarter ended December 31, 2016 is presented for review and approval. During this quarter, there were 1,831 purchases amounting to \$2,865,033,514.06 and 2,989 disposals amounting to \$2,704,051,362.55. The disposals consisted of 2,600 sales, 353 principal payments and 36 redemptions. While the TRS investment office initiates each of these transactions, the custodian of securities is responsible for handling and securing each stock, bond or other type of investment. At the end of the quarter, TRS's invested securities had a book value of \$14,289,029,878.51 and a market value of \$17,361,951,484.44.

3. Staff's comments on the economic and market conditions: The quarter ending December 31, 2016 was positive for US equities, but generally negative for international developed equities and Long-Term U.S. Treasuries. Duration- sensitive assets suffered as the market priced in rising US interest rates and higher inflation expectations. The unexpected result of the United States presidential election produced an initial market shock, as US equity futures traded off nearly 5% during the night of November 8th. By morning however, the volatility and uncertainty gave way to renewed optimism for risk assets as markets began to adjust for the economic impact of the Trump administration's agenda. Policies that were generally viewed as pro-cyclical include tax relief on the repatriation of corporate foreign cash holdings, corporate and income tax reductions, infrastructure spending and deregulation, particularly in the financial and energy sectors. These policy expectations were a tailwind for US equities, led to a steepening of the yield curve and increased inflation expectations across medium and long-term horizons.

The bullish sentiment in the US cleared the path for the Federal Reserve Open Market Committee to raise the benchmark federal funds rate by 25 basis points during its December meeting. The move was widely anticipated, as economic data supported the Fed tightening at this point in the economic cycle. Non-farm payroll growth continued at a pace consistent with a firming of labor market conditions. The unemployment rate declined to 4.7% in the fourth quarter. Another key factor influencing the Fed's decision to tighten monetary policy was improving wage growth. Indeed, according to the Bureau of Labor Statistics, the monthly

compound annual rate of private sector wage growth averaged 2.9% in 2016, which is the highest rate since 2009. Domestically, the S&P 1500 Index ended the quarter up 4.3%, while TRS's international benchmark, the MSCI ACWX ex US Index declined 1.2%.

US equity markets started the fourth quarter with a slight decline, fueled largely by uncertainty surrounding the presidential election. However, results shifted post-election, and all major US equity indices finished the quarter and year in positive territory, with the Russell 3000 Index returning 4.2% and 12.7%, respectively. Most notably, small-cap indices substantially outperformed large-cap counterparts, and value stocks outperformed growth stocks for the year.

Post-election, equity markets were characterized by increased risk appetite driven by expectations that the Trump administration could enact fiscal stimulus, deregulation and tax reform. The subsequent rally, which was most pronounced in small-cap indices, was led by cyclical and economically-sensitive sectors such as energy, financials and materials. As a result, the Russell 2000 Value Index notched the best performance of all US equity indices for the year, returning 31.7% in 2016 and 14.1% for the fourth quarter. The persistent "safety" trade, which drove results during the first half of 2016, slowly abated. Sectors, such as consumer staples, real estate and utilities, underperformed economically-sensitive sectors for the year.

Developed international markets ended the quarter slightly negative, but were positive for the year. Small-cap stocks underperformed large-cap stocks. Growth stocks continued to lag and remained in negative territory for the year. Cyclical sectors, such as financials and energy, provided positive contributions for the quarter. By country, there were few bright spots, with only a few European countries posting positive returns in the fourth quarter. Emerging Markets underperformed developed markets by a significant margin for the quarter. Year-end returns remained strong but lagged US equities.

The Trump administration's pro-growth agenda and anticipated interest rate hikes negatively affected bond market returns for the quarter. The Barclays Gov/Credit Bond Index returned 3.1% for the year after returning -3.4% during the fourth quarter. Long- duration government bonds, which are particularly sensitive to interest rate movements, returned -11.5% for the quarter and ended the year with a return of 1.4% as measured by the Barclays Long US Government Index. Investment grade and high yield credit spreads compressed during the quarter as appetite for credit increased. The BofAML US High Yield Index returned 17.5% for the year, its best return since 2009.

4. Performance: Financial markets were mixed for the quarter ended September 30, 2016. TRS's total assets returned 1.4% for the quarter, underperforming the Policy Index which returned 1.6%. TRS's domestic stocks gained 4.5%, outperforming the S&P 1500 Stock Index which returned 4.3% for the quarter. TRS's international stocks declined 2.9%, trailing the MSCI All Country ex US Index which had a return of -1.2% for the quarter. Alternatives and additional categories were positive contributors. TRS's bonds returned -2.9%, outperforming the Barclays Gov/Credit Bond Index which returned -3.4% for the fourth quarter. Real Estate provided strong returns for the quarter and year.

Recommendation: The Executive Secretary recommends that the Board accept and ratify the Report of the Investment Committee.

Teachers' Retirement System of Kentucky

Quarterly Investment Update

For the period ended December 31, 2016

(\$ in millions)	QTD	Fiscal Y-T-D	1-Year ⁽²⁾	3-Years ⁽²⁾	5-Years ⁽²⁾	10-Years ⁽²⁾	20-Years ⁽²⁾
Total Fund							
TRS	1.4%	5.8%	7.4%	5.2%	9.6%	5.9%	6.7%
Policy Index ⁽¹⁾	1.6%	5.6%	9.6%	5.5%	9.3%	-	-
Equities							
Domestic Equities	4.5%	10.3%	11.2%	8.2%	14.7%	7.2%	8.1%
S & P Blended Index ⁽³⁾	4.3%	8.5%	13.0%	8.9%	14.8%	7.2%	7.8%
International Equities ⁽⁴⁾	-2.9%	4.9%	1.9%	-1.7%	6.1%	1.7%	-
MSCI EAFE	-0.7%	5.8%	1.5%	-1.2%	7.0%	1.2%	-
MSCI AC World (Ex US)	-1.2%	5.7%	5.0%	-1.3%	5.5%	1.4%	-
Total Equities	2.2%	8.6%	8.3%	5.2%	12.2%	5.7%	7.3%
Fixed Income							
Total Fixed Income	-2.9%	-2.3%	3.7%	3.5%	3.2%	5.3%	5.9%
Barclays Govt/Credit Index	-3.4%	-3.0%	3.1%	3.0%	2.3%	4.4%	5.3%
Real Estate							
Non-Core Real Estate	3.1%	6.0%	14.3%	18.1%	18.0%	-	-
NCREIF Index	1.7%	3.5%	8.0%	11.0%	10.9%	-	-
Core Real Estate	1.9%	3.9%	9.6%	12.9%	12.2%	-	-
NCREIF ODCE	2.1%	4.2%	8.8%	12.1%	12.2%	-	-
Triple Net Lease	2.7%	4.7%	9.5%	8.8%	8.2%	8.3%	8.8%
CPI plus 2%	1.3%	2.3%	4.1%	3.2%	3.4%	3.9%	4.1%
Alternative Investments							
Private Equity ⁽⁵⁾	2.1%	3.7%	4.0%	10.1%	10.5%	-	-
Timberland	0.5%	1.1%	2.4%	7.5%	5.0%	-	-
NCREIF Timberland Index	1.2%	1.9%	2.6%	6.0%	7.1%	-	-
Additional Categories							
Additional Categories	2.9%	6.0%	9.0%	3.6%	8.1%	-	-
B of A Merrill Lynch High Yield Master II	1.9%	7.5%	17.5%	4.7%	7.4%	-	-

⁽¹⁾ Prior to July 1, 2008, TRS did not benchmark overall fund performance. Effective July 1, 2008, the Board of Trustees approved a Policy Index which 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.

⁽²⁾ Annualized

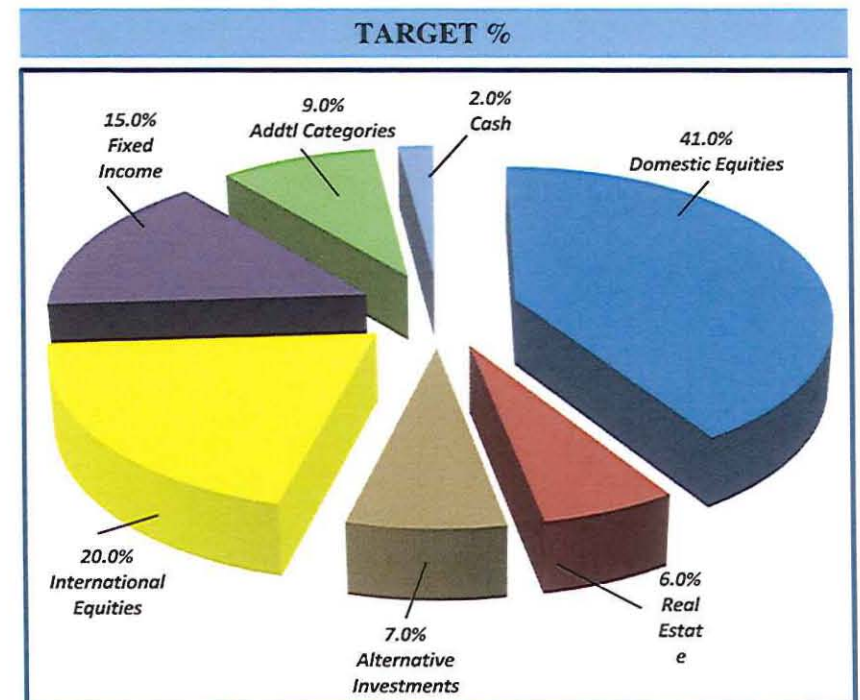
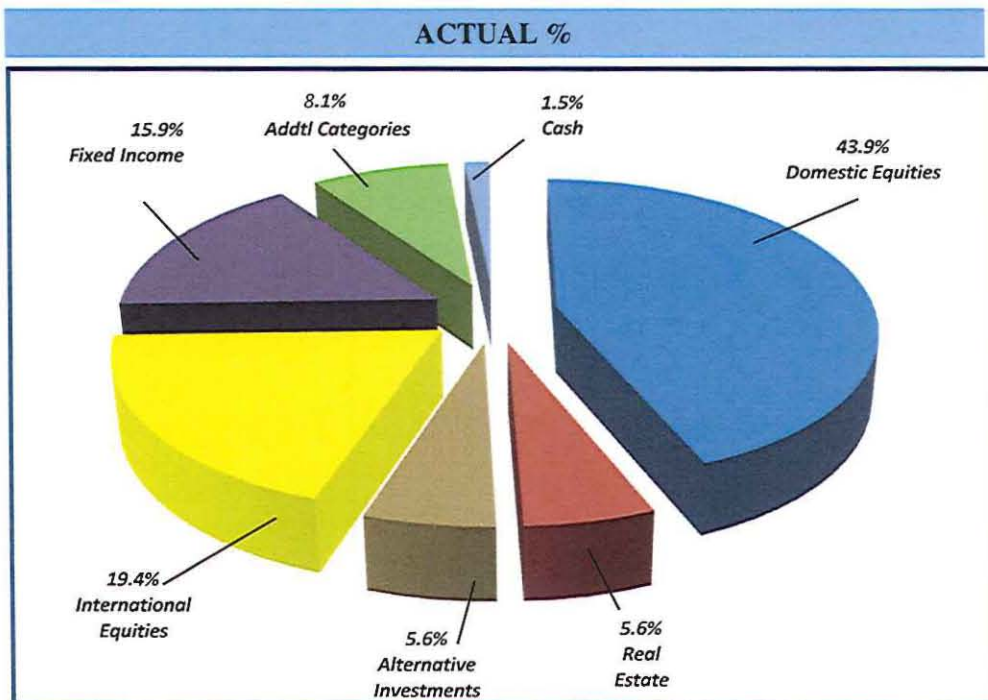
⁽³⁾ Total Domestic Equity is benchmarked to a S&P Blended Index. Total domestic equity was benchmarked to the S&P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007, domestic equity is benchmarked to the S&P 1500 Index since the System's domestic stock mix is most comparable to this index.

⁽⁴⁾ As of 12/31/16 19.8% of Total International Equities were invested in emerging markets.

⁽⁵⁾ For a period of five years private equity investments will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the first capital call, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

Teachers' Retirement System of Kentucky
Quarterly Investment Update
For the period ended December 31, 2016

(\$ in millions)	\$'s	Actual %	Target %	Strategic Ranges
Domestic Equities	\$7,612.7	43.9%	41.0%	34.0 - 48.0%
Real Estate	969.7	5.6%	6.0%	4.0 - 8.0%
Alternative Inv.	979.0	5.6%	7.0%	4.0 - 10.0%
International Equities	3,371.7	19.4%	20.0%	17.0 - 23.0%
Fixed Income	2,764.9	15.9%	15.0%	12.0 - 19.0%
Addtl Categories	1,408.7	8.1%	9.0%	6.0 - 12.0%
Cash	\$255.3	1.5%	2.0%	1.0 - 3.0%
Total	\$17,362.0	100.0%	100.0%	



INVESTMENT PERFORMANCE
TOTAL RETURN (%)
for periods ending December 31, 2016

	Market Value Millions \$	Quarter Ending 12/31/2016	One Year*	Three Years*	Five Years*	Ten Years*	Fifteen Years*	Twenty Years*
Total Plan Policy Index**	17,362.0	1.4 1.6	7.4 9.6	5.2 5.5	9.6 9.3	5.9 -	6.1 -	6.7 -
<u>Stocks</u>								
Total Stocks	10,984.4	2.2	8.3	5.2	12.2	5.7	6.0	7.3
All Cap Stocks Russell 3000	218.4	- -	- -	- -	- -	- -	- -	- -
Large Cap Stocks S & P 500 Index	6,255.1	4.1 3.8	10.0 12.0	8.1 8.9	14.5 14.7	7.0 7.0	- 6.7	- 6.7
Mid Cap Stocks S & P 400 Index	705.7	6.1 7.4	16.7 20.7	8.9 9.0	15.9 15.3	8.1 9.2	- -	- -
Small Cap Stocks S & P 600 Index	433.5	10.1 11.1	23.2 26.6	9.3 9.5	16.9 16.6	8.9 9.0	- -	- -
Domestic Stocks S & P Blended Index***	7,612.7	4.5 4.3	11.2 13.0	8.2 8.9	14.7 14.8	7.2 7.2	7.0 6.6	8.1 7.8
International Stocks MSCI AC World (Ex US)	3,371.7	-2.9 -1.2	1.9 5.0	-1.7 -1.3	6.1 5.5	1.7 1.4	- -	- -
<u>Fixed Income</u>								
Fixed Income Barclays Govt/Credit Index	2,764.9	-2.9 -3.4	3.7 3.1	3.5 3.0	3.2 2.3	5.3 4.4	5.4 4.7	5.9 5.3
Triple Net Lease Real Estate CPI + 2%	392.6	2.7 1.3	9.5 4.1	8.8 3.2	8.2 3.4	8.3 3.9	8.6 4.1	8.8 4.1
Core Real Estate NCREIF ODCE	301.9	1.9 2.1	9.6 8.8	12.9 12.1	12.2 12.2	- -	- -	- -
Non-Core Real Estate NCREIF Property Index	275.2	3.1 1.7	14.3 8.0	18.1 11.0	18.0 10.9	- -	- -	- -
Cash (Unallocated) 90 day Treasury Bill	255.4	0.1 0.1	0.4 0.3	0.2 0.1	0.2 0.1	1.0 0.8	1.5 1.3	2.5 2.2
<u>Alternative Investments</u>								
Timberland Investments NCREIF Timberland Index	201.0	0.5 1.2	2.4 2.6	7.5 6.0	5.0 7.1	- -	- -	- -
Private Equity Investments****	777.9	2.1	4.0	10.1	10.5	-	-	-
<u>Additional Categories</u>								
Special Situations Fund	34.9	-3.1	-17.0	-5.8	2.5	-	-	-
High Yield Bond	320.2	1.1	12.9	3.7	6.2	-	-	-
KTRS Credit Fund	273.7	8.3	12.8	2.5	8.9	-	-	-
Oaktree Opportunites Fund IX, LP	49.5	3.9	5.6	3.0	-	-	-	-
Oaktree Opportunites Fund X, LP	9.6	12.1	45.7	-	-	-	-	-
AG Select Partners Advantage Fund LP	1.2	-6.9	0.8	-2.4	-	-	-	-
B of A Merrill Lynch High Yield Master II		1.9	17.5	4.7	7.4	-	-	-
Shenkman Capital Management	172.0	2.2	9.5	3.3	-	-	-	-
Highbridge Principle Strategies III	37.1	3.7	8.5	8.8	-	-	-	-
Golub Capital Pearls 11	128.4	1.4	5.7	5.9	-	-	-	-
Oaktree European Dislocation Fund, LP	10.5	7.7	18.9	13.8	-	-	-	-
Marathon Eur Credit Opp Fund II	58.2	2.7	7.7	-	-	-	-	-
Oaktree European Capital Solutions	21.7	2.5	-0.3	-	-	-	-	-
Marathon Eur Credit Opp Fund III	33.8	4.8	-	-	-	-	-	-
S & P LSTA Leverage Loan Index		2.3	10.2	3.6	-	-	-	-
Barings European Loan Fund (Babson)	102.8	1.9	7.7	-	-	-	-	-
CS Institutional WELLI, no USD, hedged to EUR (USD version)		1.4	6.9	-	-	-	-	-
Columbia High Yield Bond Fund	155.1	0.9	-	-	-	-	-	-
B of A Merrill Lynch High Yield Constrained Index		1.9	-	-	-	-	-	-

*Annualized

** Prior to 7/1/2008 TRS did not benchmark overall fund performance.

*** Total Domestic Equity is benchmarked to a S & P Blended Index. Total domestic equity was benchmarked to the S & P 500 through the fiscal year ending 6/30/2007. As of 7/1/2007 total domestic equity is benchmarked to the S & P 1500 Index since the System's domestic stock mix is most comparable to this index.

**** For a period of 5 years, the private equity investments will be benchmarked against their own returns. The primary reason for this is that these investments have a minimum investment horizon of ten years and there is no market benchmark that would be expected to track these types of assets in their early years. Beginning five years after the first capital call, investments in this class shall be benchmarked versus the S & P 500 plus 3%, which is the System's long-term expected return for this asset class.

INVESTMENT REPORT
QUARTER ENDED December 31, 2016

INVESTMENT ACTIVITY:

PURCHASES:

98	Cash Equivalents	\$ 765,650,684.50
87	Fixed Income Securities	669,265,320.37
1,333	Equity Securities	1,135,809,740.12
20	Real Estate	32,128,657.02
77	Alternative Investments	77,651,363.26
216	Additional Categories	184,527,748.79
<u>1,831</u>	<u>Total Purchases</u>	<u>\$2,865,033,514.06</u>

DISPOSALS:

4	Short-Term Pool	\$ 634,908,051.10
59	Fixed Income Securities	647,713,938.25
353	Principal Paydowns	27,887,177.31
27	Redemptions/Maturities	32,087,884.95
2,230	Equity Securities	1,109,785,765.61
29	Real Estate	18,607,893.59
107	Alternative Investments	58,712,301.39
171	Additional Categories	169,954,909.29
0	Additional Principal Paydowns	-0-
9	Additional Redemptions/Maturities	4,393,441.06
<u>2,989</u>	<u>Total Disposals</u>	<u>\$2,704,051,362.55</u>

VALUE OF PORTFOLIO:

PAR \$14.4 BILLION

BOOK \$14.5 BILLION

MARKET \$17.3 BILLION

TRS PORTFOLIO VALUES
(In Dollars)

PAR VALUE

	<u>12-31-15</u>	<u>3-31-16</u>	<u>6-30-16</u>	<u>9-30-16</u>	<u>12-31-16</u>
Short Term	277,279,649	216,384,640	294,405,676	169,532,983	255,347,706
Fixed Income	2,875,069,009	2,739,619,435	2,639,684,392	2,649,635,548	2,648,543,839
Stock	8,353,669,948	8,372,995,833	8,352,936,002	8,298,570,840	8,336,806,209
Real Estate	797,842,621	801,504,770	818,009,983	825,179,635	838,051,623
Alternative Investments	727,730,846	757,566,489	781,608,594	795,425,429	814,364,491
Additional Categories	<u>1,296,130,481</u>	<u>1,372,054,498</u>	<u>1,388,848,807</u>	<u>1,456,302,722</u>	<u>1,517,227,667</u>
Total	14,327,722,554	14,260,125,665	14,275,493,454	14,194,647,157	14,410,341,535

BOOK VALUE

	<u>12-31-15</u>	<u>3-31-16</u>	<u>6-30-16</u>	<u>9-30-16</u>	<u>12-31-16</u>
Short Term	277,279,649	216,384,640	294,405,676	169,532,983	255,347,706
Fixed Income	2,898,547,490	2,759,831,343	2,661,000,357	2,667,511,899	2,663,851,901
Stock	8,353,669,948	8,372,995,834	8,352,936,002	8,298,570,840	8,336,806,209
Real Estate	797,842,621	801,504,770	818,009,983	823,890,655	837,411,418
Alternative Investments	727,730,846	757,566,489	781,608,594	795,425,429	814,364,491
Additional Categories	<u>1,281,604,801</u>	<u>1,336,587,550</u>	<u>1,329,877,267</u>	<u>1,373,115,921</u>	<u>1,381,248,154</u>
Total	14,336,675,355	14,244,870,626	14,237,837,879	14,128,047,727	14,289,029,879

MARKET VALUE

	<u>12-31-15</u>	<u>3-31-16</u>	<u>6-30-16</u>	<u>9-30-16</u>	<u>12-31-16</u>
Short Term	277,279,649	216,384,640	294,405,677	169,532,983	255,347,706
Fixed Income	3,002,216,800	2,931,367,551	2,878,918,409	2,873,428,223	2,764,862,001
Stock	10,647,958,694	10,494,970,704	10,430,896,942	10,940,897,629	10,984,425,715
Real Estate	900,614,442	916,830,773	940,860,202	950,324,669	969,729,874
Alternative Investments	896,410,588	913,587,831	932,813,350	953,713,170	978,941,713
Additional Categories	<u>1,227,678,401</u>	<u>1,286,195,270</u>	<u>1,319,326,624</u>	<u>1,390,657,727</u>	<u>1,408,644,475</u>
Total	16,952,158,574	16,759,336,769	16,797,221,204	17,278,554,401	17,361,951,484

2016-2017 REALIZED GAINS

	<u>7-01-16 TO 9-30-16</u>	<u>10-01-16 TO 12-31-16</u>	<u>1-01-17 TO 3-31-17</u>	<u>4-01-17 TO 6-30-17</u>	<u>TOTAL</u>
STOCKS	\$52,197,157.21	\$188,001,765.32	\$ --	\$ --	\$240,198,922.53
BONDS	<u>8,053,677.46</u>	<u>28,735,268.47</u>	<u>--</u>	<u>--</u>	<u>36,788,945.93</u>
TOTAL	\$60,250,834.67	\$216,737,033.79	\$ --	\$ --	\$276,987,868.46

TOTAL BV INVESTED AT 9/30/16 \$ 14,128,047,727.00

October Activity

Purchases	701,638,238.91	
Disposals	(614,437,306.97)	
Paydowns	(8,406,783.42)	
Redemptions	(13,520,322.57)	
Short-Term Pool Net	<u>37,308,607.36</u>	102,582,433.31

November Activity

Purchases	471,896,349.47	
Disposals	(665,031,955.74)	
Paydowns	(1,717,054.62)	
Redemptions	(12,169,850.73)	
Short-Term Pool Net	<u>(18,576,724.97)</u>	(225,599,236.59)

December Activity

Purchases	925,848,241.18	
Disposals	(725,305,545.42)	
Paydowns	(17,763,339.27)	
Redemptions	(10,791,152.71)	
Short-Term Pool Net	<u>112,010,751.01</u>	283,998,954.79

TOTAL BV INVESTED AT 12/31/16 \$ 14,289,029,878.51

* KTRS 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, (\$1,967,896.59) in net transactions had occurred but had not settled. The statement does not include either expected cash receipts or disbursements associated with these pending trades. Upon settlement of these pending transactions, the net effect would be as follows:

Total Short Term	489,020,260
- Pending Payable	<u>(1,967,897)</u>
Net	<u><u>487,052,363</u></u>

INVESTMENT ACTIVITY

October 1, 2016 -- December 31, 2016

Total Book Value Invested @ 10/1/16 \$ 14,128,047,727.00

Purchases:

98	Cash Equivalents	\$ 765,650,684.50	
87	Fixed Income Securities	669,265,320.37	
1333	Equity Securities	1,135,809,740.12	
20	Real Estate	32,128,657.02	
77	Alternative Investments	77,651,363.26	
216	Additional Categories	184,527,748.79	
1831	Total Purchases	<u>\$ 2,865,033,514.06</u>	

Disposals:

4	Cash Equivalents	\$ 634,908,051.10	
59	Fixed Income Securities	647,713,938.25	
353	Principal Paydowns	27,887,177.31	
27	Redemptions / Maturities	32,087,884.95	
2230	Equity Securities	1,109,785,765.61	
29	Real Estate	18,607,893.59	
107	Alternative Investments	58,712,301.39	
171	Additional Categories	169,954,909.29	
0	Additional Principal Paydowns	-	
9	Additional Redemptions / Maturities	4,393,441.06	
2989	Total Disposals	<u>\$ 2,704,051,362.55</u>	

Total Book Value Invested @ 12/31/16 \$ 14,289,029,878.51

Total Par Value Invested @ 12/31/16 \$ 14,410,341,534.39

Total Market Value Invested @ 12/31/16 \$ 17,361,951,484.44

* KTRS 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, (\$1,967,896.59) in net transactions had occurred but had not settled. The statement does not include either expected cash receipts or disbursements associated with these pending trades. Upon settlement of these pending transactions, the net effect would be as follows:

Total Short Term	489,020,260
- Pending Payable	<u>(1,967,897)</u>
Net	<u><u>487,052,363</u></u>

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

FROM: Gary L. Harbin, CPA

DATE: March 20, 2017

SUBJECT: Legislative Report

During the meeting, staff will report on the 2017 Regular Session of the Kentucky General Assembly.

Recommendation: This report is provided for informational purposes.

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

FROM: Gary L. Harbin, CPA

DATE: March 20, 2017

SUBJECT: Report of the Governance and Audit Committee

The Governance and Audit Committee will have a special meeting on March 20, 2017, prior to the regular quarterly meeting of the board. The committee will present a report to the board during the regular quarterly meeting.

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

FROM: Gary L. Harbin, CPA

DATE: March 20, 2017

SUBJECT: Executive Secretary's Observations and Comments

1. Statement of Financial Disclosure Due Saturday, April 15, 2017: Each member of the Board of Trustees must file a Statement of Financial Disclosure with the Executive Branch Ethics Commission by Saturday, April 15, 2017.

2. Nominating Committee for Board of Trustees Positions: The Nominating Committee, consisting of representatives from the 12 KEA districts and one representative from KRTA, met at TRS on Saturday, March 11, 2017. The committee met to nominate candidates for the active teacher trustee and the retired teacher trustee positions on the Board of Trustees for the terms expiring on June 30, 2017.

Laura Schneider, Walton, Kentucky, was nominated for the first position on the ballot for the active teacher trustee position. Freddie Napier, Pikeville, Kentucky, was nominated for the second position on the ballot. Jay Morgan was nominated as the alternate.

Brenda McGown, Bowling Green, Kentucky, was nominated for the first position on the ballot for the retired teacher trustee position. James Sproul, Flat Lick, Kentucky, was nominated for the second position on the ballot. Arthur Green was nominated as the alternate.

Ballots will be mailed to all active and retired members of TRS during the first week of May 2017. Ballots will be returned to the Commissioner of Education where they will be tallied. The results of the election will be announced at the June 19, 2017 regular quarterly meeting of the board.

3. KEA Delegate Assembly: TRS staff will be available at the annual KEA Delegate Assembly to provide retirement information to persons attending the conference. TRS employees are looking forward to being available to assist our members at the conference on April 5-7, 2017. TRS has attended this meeting for the last several years, and the outreach efforts have been a success.

4. Junita Losey Scholarship Fund Update: Scholarship checks in the amount of \$2,000 have been sent to each of the eight public universities in Kentucky. TRS is expecting responses from the universities that the scholarship money has been received. Recipients may apply scholarship funds toward tuition, books or fees.

In addition, the Campbell County School System selects a student in May, who intends to enroll in one of Kentucky's public universities and major in education, to receive the Junita Losey Scholarship. The student must enroll in a Kentucky public university in the fall and then notify TRS regarding verification of their enrollment. At that time, a check in the amount of \$1,000 is sent to the university that the student selected to attend. Upon completing their first university semester, the student is to inform TRS that they are still in compliance with the scholarship

criteria, and TRS will then distribute another \$1,000 check to the university the student is attending.

5. Executive Secretary's Meetings: Staff has had meetings with several persons and groups recently. The Board will receive reports concerning the following meetings:

December 20, 2016	Meeting with Genelex and KY Rx Coalition
December 21, 2016	Conference call with FEBCO representatives
December 28, 2016	Meeting with State Budget Director John Chilton
January 3, 2017	Conference call with State Budget Director John Chilton and Office of Financial Institutions
January 9, 2017	Meeting with KRS and JFRS staff
January 13, 2017	Meeting with Todd Asset Management
January 25, 2017	Meeting with KRTA Legislative Committee
January 26, 2017	Conference call with PFM
January 27, 2017	Meeting with KRS
February 3, 2017	Attended KEAT meeting
February 7, 2017	Meeting with communications consultant
February 17, 2017	Meeting with Dave Adkisson, KY Chamber of Commerce
February 20, 2017	Conference call with investment experts
February 21, 2017	Meeting to discuss pharmacogenomics RFI responses
February 21, 2017	Meeting with David Eager, Executive Director, Kentucky Retirement Systems
March 7, 2017	Know Your RX Coalition Board meeting
March 11, 2017	KEA Nominating Committee
March 13, 2017	Public Sector Healthcare Roundtable Board meeting
March 15, 2017	Meeting with KRTA Executive Director

6. Pharmacogenetics RFI: In January 2017, TRS's health care consultant published a Request for Information (RFI) seeking comments on using pharmacogenetics (pharmacogenomics) for managing prescription drug usage and reducing costs. TRS staff, the Know Your Rx Coalition staff, and TRS's consultant met to review the 11 responses to the RFI. Three companies were identified as likely candidates to undertake a pilot program using pharmacogenetics. TRS is engaged in ongoing discussions with the Know Your Rx Coalition concerning the possibility of undertaking a pilot program.

7. Next Meeting: The next regular quarterly meeting of the Board of Trustees will be on Monday, June 19, 2017.