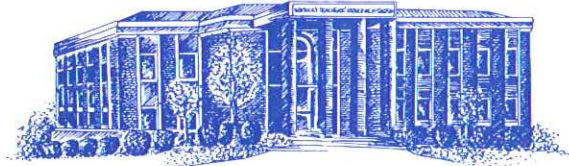


TEACHERS' RETIREMENT SYSTEM OF KENTUCKY

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



SERVING KENTUCKY TEACHERS SINCE 1940

ROBERT B. BARNES, JD
Deputy Executive Secretary
Operations and General Counsel
(502) 848-8500

J. ERIC WAMPLER, JD
Deputy Executive Secretary
Finance and Administration
(502) 848-8500

MEMORANDUM

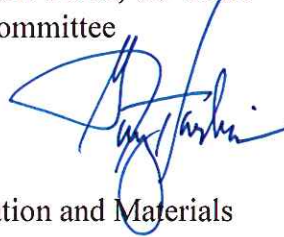
TO: Interim Joint Committee on State Government

- Senator Joe Bowen, Co-Chair
- Representative Brent Yonts, Co-Chair
- Members of the Committee

FROM: Gary L. Harbin, CPA
Executive Secretary

RE: Supplemental Information and Materials

DATE: December 23, 2013



At the meeting of the Interim Joint Committee on State Government on November 20, 2013, KTRS was asked to produce certain supplemental information and materials. In response to the questions, please note the following:

1. Question from Representative Yonts: What is the historical attribution of the unfunded actuarial liability for the Kentucky Teachers' Retirement System during the period from fiscal year 2008 through fiscal year 2013?

KTRS Response: Attached is the historical attribution of unfunded actuarial liability for KTRS for the period from fiscal year 2008 through 2013. This schedule confirms that liabilities are growing at 7.5% while the market has returned near zero for more than a dozen years. KTRS's focus on value investing, low investment and administrative costs, and top 7% investment performance over the last 5 years has mitigated much of the bad news from Wall Street. The five year smoothing methodology used by the actuary resulted in the actuary reporting \$14.9 billion as the value of plan assets as of June 30, 2013 compared to market value of assets at that date of \$16.1 billion.

The S&P 500 notable highs over the last thirteen years and at the close of fiscal year 2013 are as follows: 1552.87 at March 24, 2000; 1565.26 at October 9, 2007; 1606.28 at June 30, 2013. Since June 30, 2013, the market has exhibited the first breakout above these notable highs and is currently trading at 1826.90 at December 22, 2013.

KTRS's total fund returns during this period and over thirty years are set forth in the schedule below. Please note that KTRS's 30 year rate of return as of September 30, 2013 is 9.07%, which is consistent with the actuarial assumed rate of 7.5%.

	<u>1 Year</u>	<u>3 year</u>	<u>5 Year</u>	<u>10 Year</u>	<u>30 Year</u>
June 30, 2013	14.14	12.41	6.62	6.42	8.93
September 30, 2013	14.48	11.18	9.06	6.84	9.07

The historical attribution schedule also details the marked trend wherein the required employer contribution is increasing exponentially because the employer contribution is not being regularly paid on an annual basis. Since fiscal year 2008, the state has not paid the additional annual employer contributions necessary to pre-fund the benefit requirements of members of the retirement system. Over this period of time, because the state has not been able to fund the retirement system, the state's additional annual employer contribution has grown significantly from \$60.5 million (fiscal year 2009) to \$261 million (fiscal year 2013). Moreover, if the required contributions are not made for fiscal years 2014 to 2016, the employer contribution shortfall will increase by \$1.2 billion. The following schedule details the growth of the additional annual retirement contributions payable by the state:

Fiscal Year	Cumulative Increase as a % of Payroll	Cumulative Increase of Annual Retirement Appropriations Payable by the State
2009	1.88	\$ 60,499,800
2010	2.46	82,331,200
2011	3.59	121,457,000
2012	5.81	208,649,000
2013	7.27	260,980,000
2014	8.02	299,420,000
2015	10.42	386,400,000
2016	12.97	487,400,000

(Source: KTRS Report of the Actuary on the Annual Valuation Prepared as of June 30, 2013).

In 2010, the General Assembly enacted the "Shared Responsibility" solution for pre-funding retiree health insurance, which eliminated \$5.2 billion in liability for retiree medical insurance. This historic legislation put retiree health insurance on a sustainable path with dedicated funding. The solution also helped the long-term funding of the retirement plan because the practice of borrowing retirement contributions to pay for current health insurance costs was eliminated. Additionally, the state repaid some of the retirement plan funds borrowed in past years. These actions helped ensure the security of the medical insurance of retired teachers, improved the financial condition of the Commonwealth, and eased burdens on taxpayers.

KTRS benefits are reasonable and cost effective compared to other types of retirement plans. The KTRS investment program has performed well year after year, and the costs of administration of the retirement plan are some of the lowest in the country. KTRS's positive qualities are the result of many years of consistent control and oversight by the Board of Trustees according to state law.

2. Question from Senator Blevins: What investments does KTRS maintain within Kentucky?

KTRS Response: Each year KTRS reports to the General Assembly the retirement system's investments within the Commonwealth of Kentucky. As of June 30, 2013, KTRS had approximately \$318 million in in-state investments, consisting largely of commercial real estate, single family and multi-family mortgages, bonds of corporations headquartered in Kentucky and debt obligations of state and local government entities. KTRS actively seeks investments which support the economic welfare of the Commonwealth wherever consistent with the fiduciary duty that assets be managed "...solely in the interests of the active contributing members and annuitants..." of the retirement system.

Additionally, KTRS has substantial investment holdings in companies doing business within Kentucky. KTRS has hundreds of millions of dollars in equity holdings in the following publicly traded companies that have substantial economic impact on the Commonwealth: Apple, Inc., General Electric, United Parcel Service, Humana, Amazon, Yum Brands, Ford, Brown-Forman, JPMorgan Chase, Ashland, Inc., Tempur Sealy International, and Lexmark International.

These companies employ thousands of Kentuckians, pay state and local taxes, and are solid investments for ensuring the retirement security of teachers. For example, Apple is KTRS's largest equity holding. Kentucky and its teachers, through KTRS's equity holdings, have shared in Apple's success. The gorilla glass used in Apple's iPhone is made by Corning in Harrodsburg, KY (among other places). Amazon (KTRS's 8th largest equity holding) is a significant employer in Kentucky with a large distribution center in Lexington and several smaller locations around the state. UPS, Humana, Ford, GE, and Yum Brands are major economic drivers in Louisville. Brown-Forman, Ashland, Tempur Sealy, and Lexmark are Kentucky-based companies with significant economic impact.

**Kentucky Teachers Retirement System
Historical Attribution of Unfunded Actuarial Liability**

(in millions)

Interest Rate	Fiscal Year	Unfunded Actuarial Liab. (Beg. Of Year)	Actuarial Returns Actual vs. Assumed Investment (G)/L*	AD Hoc COLA / Benefits	Methods / Actuarial Assumptions	Employer Contribution Shortfall	Net Medical Fund Allocation	Demographic & Salary Experience	Other	Unfunded Actuarial Liab. (End of Year)
7.50%	2008	5,970.0	668.6	0.0	0.0	0.0	100.9	251.4	148.1	7,139.0
7.50%	2009	7,139.0	1,024.1	0.0	0.0	60.5	101.2	5.2	184.4	8,514.4
7.50%	2010	8,514.4	1,026.3	0.0	0.0	82.3	(389.3)	(2.9)	262.2	9,493.0
8.00%	2011	9,493.0	521.2	0.0	743.1	121.5	8.4	(85.8)	259.2	11,060.6
8.00%	2012	11,060.6	740.5	0.0	(29.6)	208.6	8.5	(4.5)	298.4	12,282.5
7.68%	2013	12,282.5	146.6	0.0	920.7	261.0	(6.2)	(110.0)	359.9	13,854.5
Total Increase			4,127.3	0.0	1,634.2	733.9**	(176.5)	53.4	1,512.2	7,884.5

Unfunded Accrued Liability - End of Year (based on Market Value of Assets as of 6/30/2013)

12,708.4

* Earnings on actuarial value of assets greater than or less than expected based on the assumed annual interest rate.

** Additional shortfall for fiscal years 2014 to 2016 will be \$1,173.2 if required contributions are not made during that time.