

Kentucky Teachers' Retirement System

Information for the

Kentucky Board of Education



Presented by

Beau Barnes



Gary L. Harbin, CPA
Executive Secretary

December 3, 2014

Kentucky Teachers' Retirement System



*Established in 1938, KTRS provides
“Retirement Security” for
Kentucky’s educators.*



KTRS Quick Facts ...



**Membership
of Over
141,000**



**Over 49,500
Receive a
Benefit from
KTRS**



**KTRS Distributes Over \$144 Million
Monthly in Retirement Benefits**



**KTRS has over
\$ 18.5 Billion in
Assets**



**1 in 4 Teachers
are Eligible to
Retire**

Recap of Actuarial Status of the System

as of June 30, 2013

In Millions of Dollars

<u><i>Pre-funded</i></u>	Assets	Liabilities	Unfunded	Percent
RETIREMENT Benefit Fund	14,962.8	28,817.2	13,854.4	51.9%
<u><i>Pre-funded*</i></u>	Assets	Liabilities	Unfunded	Percent
MEDICAL Benefit Fund	412.2	3,521.1	3,108.9	11.7%

** Transitioning to Pre-funded as of July 1, 2010*

Top-Performing Public Pension Funds

Top-performing public pension funds

Ranked by one-year return as of June 30. For the full set of data, go to Pionline.com/publicfunds13.

Rank	Pension fund	Return	Benchmark	Out-performance (basis pts.)
1	Oklahoma Teachers	17.40%	14.40%	300
2	San Bernardino County	15.05%	8.20%	685
3	Stanislaus County	14.60%	11.53%	307
4	Missouri Local Government	14.50%	9.10%	540
5	Nashville & Davidson County	14.22%	10.99%	323
6	Minnesota Board	14.20%	12.90%	130
7	Dallas Employees	14.20%	13.10%	110
8	Kentucky Teachers	14.10%	12.90%	120
9	Louisiana Schools	14.01%	13.48%	53
10	CalSTRS	13.80%	13.30%	50
Wilshire TUCS all public median		12.40%		

Source: Plan reports, Wilshire Associates' Trust Universe Comparison Service

INVESTMENT PERFORMANCE

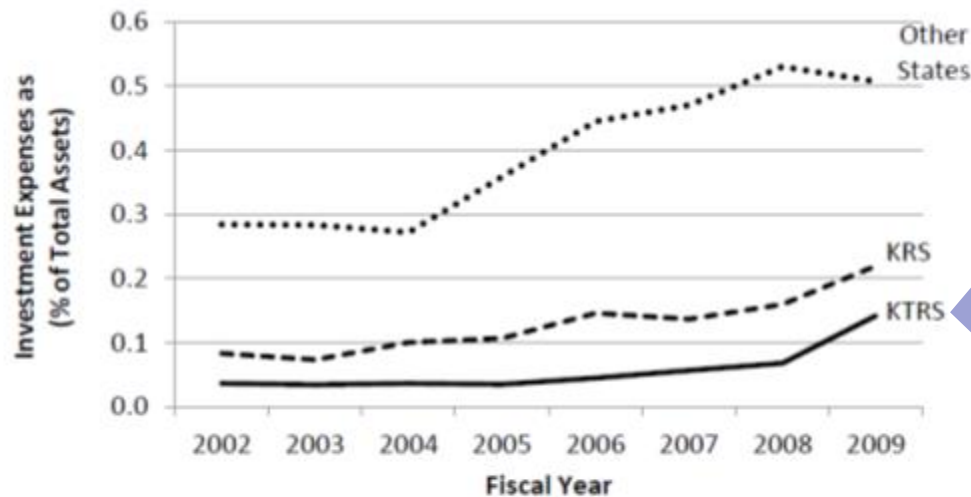
KTRS RETURNS

FISCAL YEAR ENDED JUNE 30, 2014

1-Year	3-Year	5-Year	10-Year	20-Year
18.1%	11.3%	13.7%	7.2%	8.2%



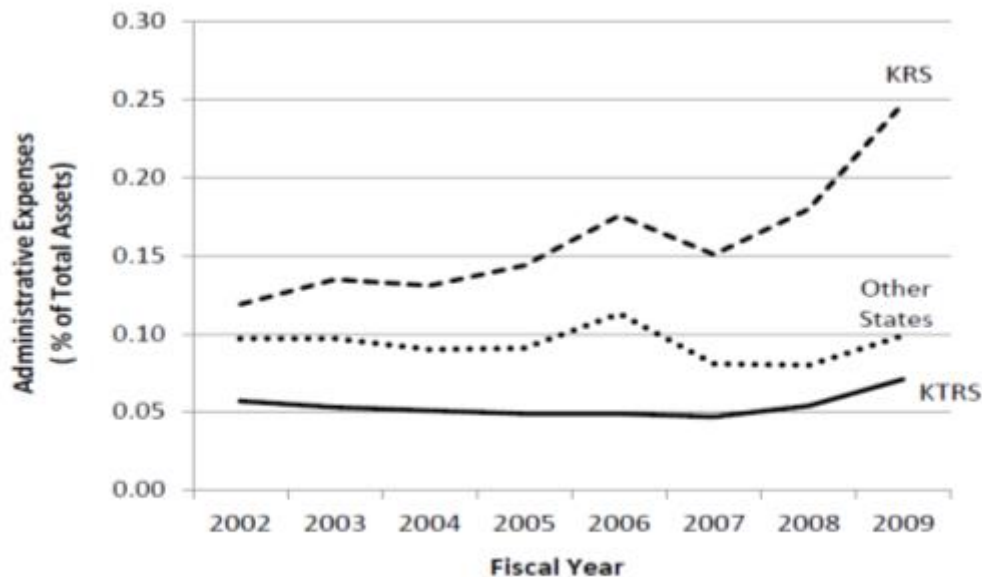
Over the last year public pensions averaged 16.1% as reported by Callan Associates. *one of the largest independently owned investment consulting firms in the country.*



Note: Value of pension plan assets is the market value.

Source: Staff analysis of data from Boston College's Center for Retirement Research; Commonwealth. Kentucky Retirement. *Comprehensive*, various years; ; Commonwealth. Kentucky Teachers'. *Comprehensive*, various years.

INVESTMENT EXPENSES
as a Percentage of Pension Assets for KRS, KTRS, and the Average of Other States FY 2002 to FY 2009



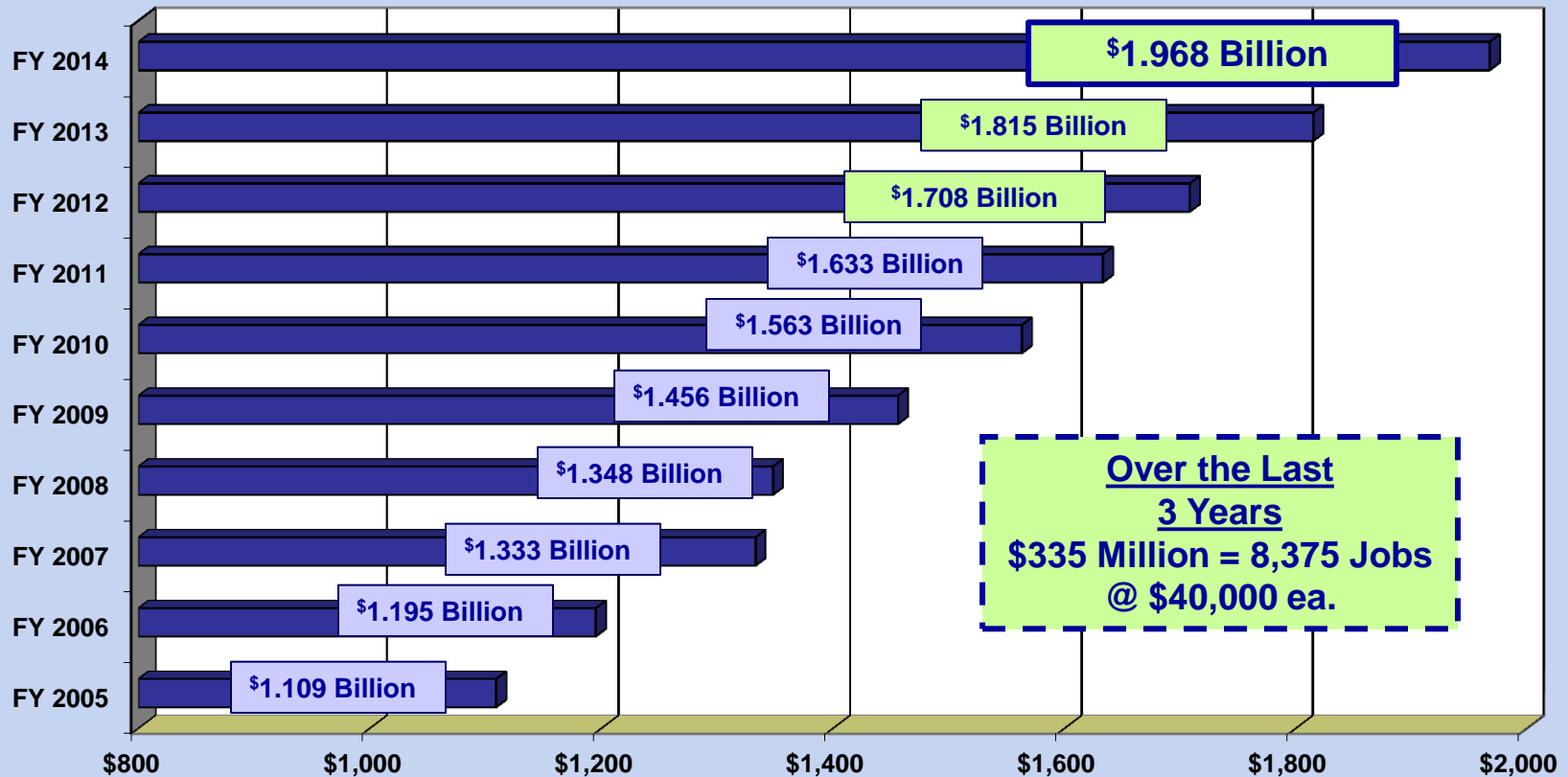
Note: Value of pension plan assets is the market value.

Source: Staff's analysis of data from Boston College's Center for Retirement Research.

ADMINISTRATIVE EXPENSES
as a Percentage of Pension Plan Assets for KRS, KTRS, and Average of Other States FY 2002 to FY 2009

*Program Review and
Investigations Committee
9.13.2012*

KTRS Distributes Hundreds of Millions of Dollars Annually



92% of KTRS retirees live in Kentucky.



WHAT IS

Annual Required Contribution (ARC)

The amount an employer must contribute annually to a defined benefit pension fund, based on an actuarial formula, to fund current and future retirement benefits and liabilities. **It is the amount needed to pay the benefits of current and future retirees.**

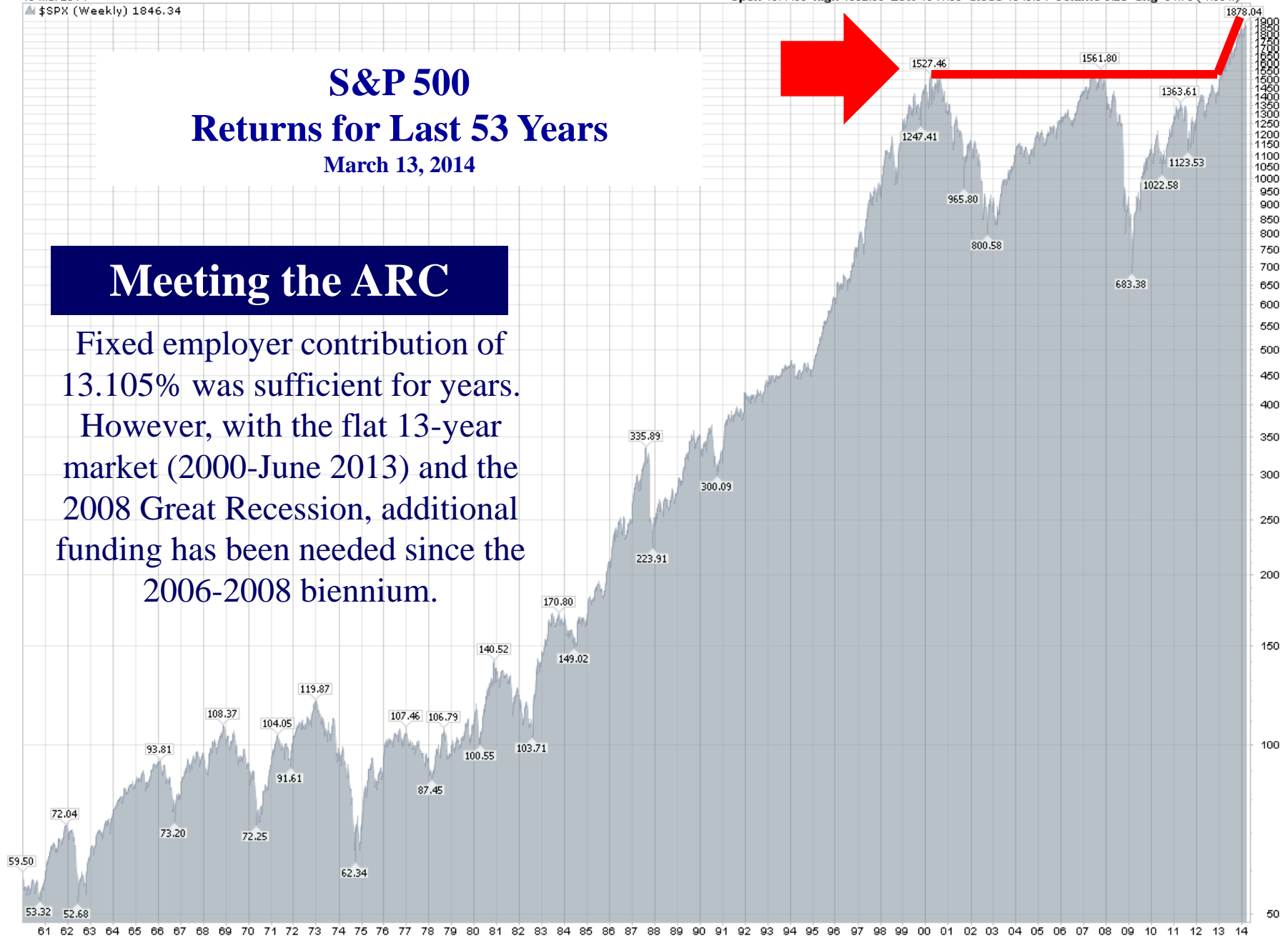


S&P 500 Returns for Last 53 Years

March 13, 2014

Meeting the ARC

Fixed employer contribution of 13.105% was sufficient for years. However, with the flat 13-year market (2000-June 2013) and the 2008 Great Recession, additional funding has been needed since the 2006-2008 biennium.



Short-Term Funding Challenges

- An economy that is improving, but hasn't fully recovered.
- Finite revenue.
- Challenging budgets.



**KTRS has been asked to
develop a short-term funding
plan given these current
budgetary challenges.**

**One option is to
re-purpose monies already
budgeted to KTRS to
issue a bond.**

*This plan gives time for Kentucky's economy
to improve, revenue to grow and for
the Commonwealth to develop
a long-term funding plan.*

Benefit of Bonding ...

**Teachers' pension liability
grows at 7.5% per year.**

- A bond could be issued at a much lower rate with the current historically low interest rates.
- *Much like refinancing your home.*

Additional Benefits of Bonding ...

- **Pays the full ARC for several years.**
- **Improves the funded ratio up to 63%.**
- **Reduces the amount of funding needed in future years.**

Prepared by OSBD

Fiscal Year	Bond Issue A <u>August 2010</u> \$467,555,000	Bond Issue B <u>March 2011</u> \$269,815,000	Bonds Issue C <u>February 2013</u> \$152,400,000	Total Debt Service <u>Budgeted</u>	Difference from <u>FY 2016</u>
2011	55,092,681			55,092,681	
2012	69,042,487	26,235,908	-	95,278,395	
2013	69,029,491	34,321,283		103,350,774	
2014	69,029,744	34,301,452	21,458,000	124,789,196	
2015	69,027,711	34,302,558	17,362,983	120,693,251	
2016	64,776,650	34,301,143	17,358,769	116,436,562	
2017	55,699,175	33,776,181	17,363,012	106,838,368	(9,598,194)
2018	45,490,372	34,298,205	17,359,347	97,147,924	(19,288,638)
2019	27,208,284	34,297,016	17,360,725	78,866,025	(37,570,537)
2020	8,919,862	34,298,555	17,359,998	60,578,416	(55,858,146)
2021		34,296,444	17,363,554	51,659,998	(64,776,564)
2022		15,653,375	17,362,474	33,015,849	(83,420,713)
2023			17,365,463	17,365,463	(99,071,099)
2024				0	(116,436,562)

**Funding
Proposed
in
2014 –
2016
Budget**

Funding Provided in 2014-2016 Budget

	Actual 2012-2013	Actual 2013-2014	Provided by Budget 2014-2015	Provided by Budget 2015-2016
Personal Payments	\$ 2,348,000	\$ 2,563,900	\$ 1,938,900	\$ 1,959,800
1992-94 Increase in Survivor Benefits	1,483,000	1,507,900	1,525,100	1,542,500
Prior Service	640,000	640,000	640,000	640,000
Handicapped Child	621,900	648,100	617,300	640,800
Amortized Payments				
1998-2000 COLA	15,333,900	7,938,600		
2000-02 COLA	12,511,400	12,511,400	12,511,400	7,227,700
2002-04 COLA	21,405,700	21,405,700	21,405,700	21,405,700
2004-06 COLA	15,413,700	15,413,700	15,413,700	15,413,700
2006-08 COLA	15,730,200	15,730,200	15,730,200	15,730,200
2002-04 Min Benefit Adj (\$335-\$440)	3,375,900	3,375,900	3,375,900	3,375,900
Sick leave liability 1998-2000	4,660,300	2,425,900		
Sick leave liability 2000-2002	6,167,100	6,167,100	6,167,100	3,579,100
Sick leave liability 2002-2004	5,337,000	5,337,000	5,337,000	5,337,000
Sick leave liability 2004-2006	5,480,300	5,480,300	5,480,300	5,480,300
Sick leave liability 2006-2008	5,814,400	5,814,400	5,814,400	5,814,400
Sick leave liability 2008-2010	5,042,700	5,042,700	5,042,700	5,042,700
Sick leave liability 2010-2012	9,632,400	9,632,400	5,198,100	5,198,100
Sick leave liability 2012-2014	4,190,100	8,630,400	7,808,600	7,808,600
Sick leave liability 2014-2016			4,527,300	9,448,000
Medical Insurance subsidy amortization 2008-10 Biennium	2,574,100	2,574,100	2,574,100	2,574,100
Medical Insurance subsidy amortization 2010-12 Biennium	3,363,200	3,363,200	3,363,200	3,363,200
State Cost for new retirees starting 7/1/10		38,700,000	50,200,000	61,300,000
Employer Contribution Shortfall 2011-2013 KRS 161.550(6)	194,000		31,408,200	-
Actuarial required employer contributions				
TOTAL KTRS BUDGET REQUEST	\$ 141,319,300	\$ 174,902,900	\$ 206,079,200	\$ 182,881,800
<i>Payments available for debt service</i>	<i>136,032,400</i>	<i>130,843,000</i>	<i>119,749,700</i>	<i>116,798,700</i>
Memo Only - Debt Service on POB and OPEB Bond				
<i>Debt service paid to OFM included in enacted</i>	<i>103,350,800</i>	<i>124,789,200</i>	<i>120,693,300</i>	<i>116,436,600</i>
	<i>244,670,100</i>	<i>299,692,100</i>	<i>326,772,500</i>	<i>299,318,400</i>

Teachers' Pension Refinancing Plan

November 2014

\$1.9 Billion Bond

Fiscal Year	Analysis of Additional ARC		Sources of Funding to Fund Additional ARC			Additional ARC Request From General Fund		
	(a)*	(b)	(c)	(d)	(e) (c)+ (d)	(f) (b)-(e)	(g) 4.1% - 7/1/14	(h)
	If Additional ARC is not Funded	Adjusted for Bond Proceeds	Current Funding Repurposed For Debt Service	Funding Proposed in Enacted Budget	Net Available to Fund Additional ARC	Net Additional ARC	Bond Proceeds Balance Forward	Step Into Funding Full ARC
							1,933,000,000	
FY 2015-16	487,400,000	487,400,000	-		-	487,400,000	487,400,000	
FY 2016-17	478,220,618	478,220,618	(105,991,900)	9,598,194	(96,393,706)	574,614,324	574,614,324	92,000,000
FY 2017-18	484,623,353	341,555,307	(104,643,800)	19,288,638	(85,355,162)	426,910,469	426,910,469	184,000,000
FY 2018-19	508,927,511	349,963,699	(102,616,000)	37,570,537	(65,045,463)	415,009,162	415,009,162	276,000,000
FY 2019-20	526,222,593	357,094,568	(101,387,100)	55,858,146	(45,528,954)	402,623,522	29,066,044	366,440,704
FY 2020-21	563,732,710	383,891,600	(100,041,900)	64,776,564	(35,265,336)	419,156,936		397,109,108
FY 2021-22	631,528,760	439,479,703	(98,477,400)	83,420,713	(15,056,687)	454,536,390		408,980,567
FY 2022-23	706,938,297	472,522,726	(84,162,900)	99,071,099	14,908,199	457,614,527		407,316,698
FY 2023-24	790,531,793	500,161,551	(69,936,000)	116,436,562	46,500,562	453,660,989		399,305,968
FY 2024-25	884,048,783	526,782,692	(59,022,100)	116,436,562	57,414,462	469,368,230		412,698,436
FY 2025-26	988,477,985	555,095,829	(49,042,000)	116,436,562	67,394,562	487,701,267		428,117,586

* The Annual Required Contributions (ARC) have been updated by actuary to reflect positive investment gains for fiscal year 2014. These amounts are on average \$50 million less per year from those disclosed in the Spring of 2014.

Teachers' Pension Refinancing Plan

November 2014

\$3.3 Billion Bond

Fiscal Year	Analysis of Additional ARC		Sources of Funding to Fund Additional ARC			Additional ARC Request From General Fund		
	(a)*	(b)	(c)	(d)	(e) (c) only	(f) (b)-(e)	(g) 4.4% - 7/1/14	(h)
	If Additional ARC is not Funded	Adjusted for Bond Proceeds	Current Funding Repurposed For Debt Service	Funding Proposed in Enacted Budget	Net Available to Fund Additional ARC	Net Additional ARC	Bond Proceeds Balance Forward 3,300,000,000	Step Into Funding Full ARC
FY 2015-16	487,400,000	487,400,000	-		-	487,400,000	487,400,000	
FY 2016-17	478,220,618	478,220,618	(105,991,900)	-	(105,991,900)	584,212,518	584,212,518	45,000,000
FY 2017-18	484,623,353	240,542,978	(104,643,800)	-	(104,643,800)	345,186,778	345,186,778	90,000,000
FY 2018-19	508,927,511	237,229,159	(102,616,000)	-	(102,616,000)	339,845,159	339,845,159	135,000,000
FY 2019-20	526,222,593	231,923,084	(101,387,100)	-	(101,387,100)	333,310,184	333,310,184	180,000,000
FY 2020-21	563,732,710	244,255,354	(100,041,900)	-	(100,041,900)	344,297,254	344,297,254	225,000,000
FY 2021-22	631,528,760	284,500,580	(98,477,400)	-	(98,477,400)	382,977,980	382,977,980	270,000,000
FY 2022-23	706,938,297	328,550,958	(84,162,900)	-	(84,162,900)	412,713,858	412,713,858	315,000,000
FY 2023-24	790,531,793	377,624,355	(69,936,000)	-	(69,936,000)	447,560,355	70,056,269	360,000,000
FY 2024-25	884,048,783	432,168,775	(59,022,100)	-	(59,022,100)	491,190,875		403,475,890
FY 2025-26	988,477,985	493,984,361	(49,042,000)	-	(49,042,000)	543,026,361		420,803,427

* The Annual Required Contributions (ARC) have been updated by actuary to reflect positive investment gains for fiscal year 2014. These amounts are on average \$50 million less per year from those disclosed in the Spring of 2014.

The Importance of Funding

- KTRS has been experiencing a negative cash flow since 2008.
- KTRS will have to sell approximately \$1.3 billion in assets in FY 2014-2016.
- KTRS investment strategy is becoming increasingly constrained by liquidity requirements. These constraints will lower future investment returns.
- Additional funding will help stabilize this deteriorating situation.

Actuarial Status of the System

Under New GASB Accounting Rules

as of June 30, 2013

In Millions of Dollars

<u><i>Pre-funded</i></u>	Assets	Liabilities	Unfunded	Percent
RETIREMENT Benefit Fund	14,962.8	28,817.2	13,854.4	51.9%
			21,905.6*	42.4%*
<u><i>Pre-funded*</i></u>	Assets	Liabilities	Unfunded	Percent
MEDICAL Benefit Fund	412.2	3,521.1	3,108.9	11.7%

* New accounting rules, set by GASB, will require underfunded pension plans to report unfunded liability using a lower assumed rate of return, thus reducing our funding percentage from 51.9% to 42.4%.

** Transitioning to Pre-funded as of July 1, 2010*

The Importance of Funding

Most teachers do not participate in Social Security and a Federal law offset will, in almost every case, eliminate their ability to receive a Social Security survivor benefit from their spouse's account.

Under Age 80

	NUMBER	PERCENT
Females	29,320	70%
Males	12,636	30%
Total	41,956	100%

Age 80 & Above

	NUMBER	PERCENT
Females	4,736	73%
Males	1,771	27%
Total	6,507	100%

52% of retirees less than age 80 are single.

85% of retirees age 80 and above are single.



Teachers' Retirement System
of the State of Kentucky

***Our Members
Come First!***

1.800.618.1687

502.848.8500

www.ktrs.ky.gov

Protecting & Preserving Teachers' Retirement Benefits