



Memorandum

To	Kentucky Retirement System Investment Committee
From	RVK, Inc.
Subject	2013-2014 Fixed Income Market Overview & Portfolio Review
Date	August 5, 2014

KRS Portfolio Performance Summary

Both the Pension and Insurance plans' Fixed Income portfolios performed well on an absolute and relative basis for the 12 months ending June 30, 2014. The KRS Pension Fixed Income portfolio returned 7.1% net of fees¹ for the fiscal year, outperforming the Barclays Universal Index by 1.9%. The KRS Insurance Fixed Income portfolio returned slightly less than the Pension plan at 6.5%, still outperforming the Barclays Universal Index of 5.2%. Similar to last fiscal year, outperformance of the Fixed Income portfolio for both plans was primarily due to the 25% target allocation to high yield which had an exceptionally strong year. The high yield managers within the KRS Pension Portfolio returned 11.8% for the fiscal year. Emerging market debt (EMD) strategies within the Global Fixed Income composite also contributed to the outperformance of the Fixed Income portfolios, returning 8.5% for the year (Pension).

Fiscal year 2014 marks the fifth consecutive year the KRS Pension Fixed Income portfolio has outperformed the Barclays Universal Index and the third consecutive year for the KRS Insurance Fixed Income portfolio.

The table below lists each fixed income manager's market value, specific investment strategy and corresponding allocation within the KRS Fixed Income portfolio.

Fixed Income Market Values & Target Sector Allocations							
Sub-Composite	Pension Plan		Insurance Plan		Target Sector Allocations		
	Market Value	% of Total	Market Value	% of Total	Core	High Yield	Global EMD
Core Fixed Income	\$1,363,580,332	62.0%	\$532,748,660	64.4%			
NISA	\$556,233,147	25.3%	\$206,632,075	25.0%	27.5%		
PIMCO	\$807,347,184	36.7%	\$326,116,585	39.4%	22.5%		15.0%
High Yield	\$598,103,123	27.2%	\$198,621,461	24.0%			
Columbia	\$168,104,247	7.6%	\$52,799,606	6.4%		7.5%	
Loomis	\$177,821,634	8.1%	\$55,826,998	6.7%		7.5%	
Shenkman	\$117,039,325	5.3%	\$40,321,487	4.9%		5.0%	
Waterfall	\$135,137,916	6.1%	\$49,673,370	6.0%		5.0%	
Global Fixed Income	\$237,201,933	10.8%	\$96,104,319	11.6%			
Manulife	\$118,692,019	5.4%	\$48,419,760	5.9%			5.0%
Stone Harbor	\$118,509,914	5.4%	\$47,684,559	5.8%			5.0%
Total Fixed Income	\$2,198,885,388	100.0%	\$827,474,441	100.0%			

High Yield includes Bank Loans and High Yield ABS.

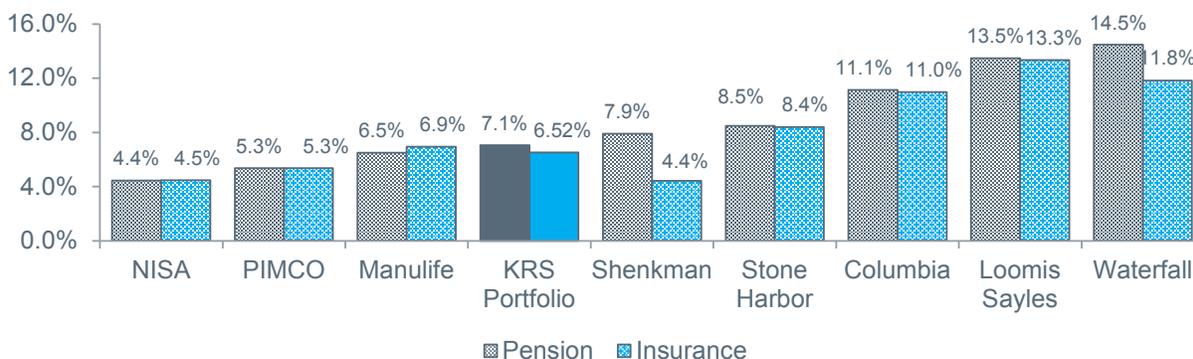
¹ All KRS performance figures are shown net of fees.



All managers posted positive returns during the year with Waterfall (Pension) leading with a 14.5% return, and NISA posting the lowest absolute return of 4.4% (Pension). On a relative basis, there were a number of managers that underperformed their benchmarks during the fiscal year, including PIMCO, Columbia, Shenkman, Manulife, and Stone Harbor. NISA, Loomis, and Waterfall all outperformed their respective benchmarks.

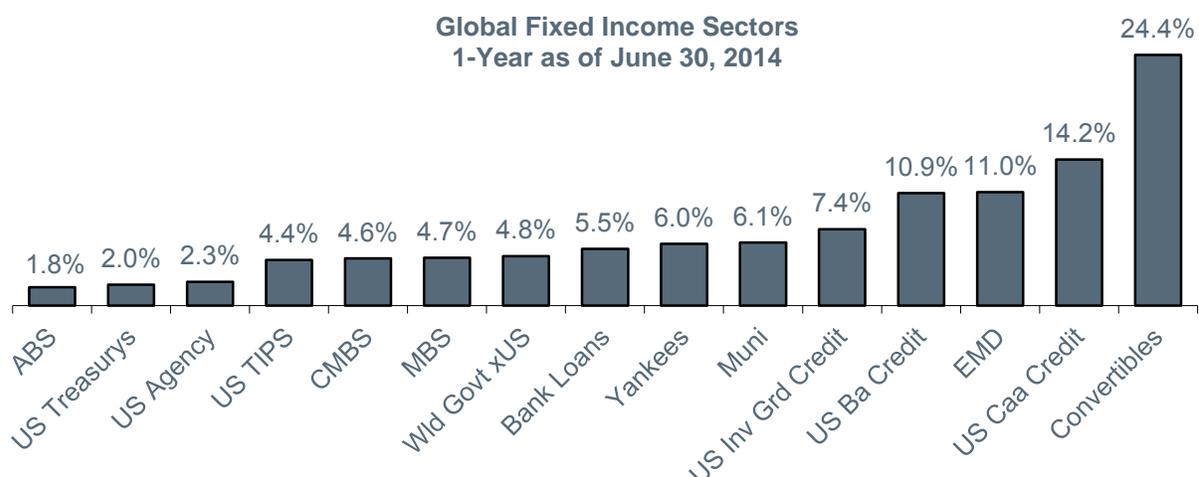
NISA, PIMCO, Stone Harbor, and Waterfall are the only managers KRS has invested with for greater than 3 years. The remaining fixed income managers, Manulife, Columbia, Loomis and Shenkman have at most 2 years of history with KRS. Because of the brief history with the current fixed income managers, it can be difficult to fairly and accurately assess the performance of individual managers and the overall Fixed Income portfolio.

**KRS Fixed Income Portfolio Performance
12 months Ending June 30, 2014**



Fixed Income Market and Performance Commentary

Fixed income performance was solid across the board for the fiscal year ending June 30, 2014. The appetite for yield was prevalent as Convertibles and US Caa Credit posted the highest returns across the global fixed income sector for the second year in a row.



First Fiscal Quarter (CY Q3 2013) – After a difficult end to the previous fiscal year, fixed income markets regained lost ground during the quarter, although not without interest rate volatility. The 10-year yield increased 30 basis points in July and August as investors anticipated “tapering” of the Fed’s current bond purchase strategy and dropped 17 basis points in September after investors learned the Fed would continue asset purchases. Demand for Mortgage Backed Securities (MBS) re-emerged after the Fed announced it would continue to purchase \$40 billion per month of MBS under the QE program. Credit sectors also contributed to performance, led by Bank Loans and High Yield. For the quarter, lower rated High Yield was the best performing Fixed Income sub-sector, up 3.7% and Emerging Market debt returns stabilized somewhat, returning 1.2%.

The KRS Pension Fixed Income portfolio returned 1.2%, outperforming its benchmark return of 0.8% (Barclays Universal Bond Index). The KRS Insurance Fixed Income portfolio returned 1.5%, also outperforming the Barclays Universal Bond Index.

Second Fiscal Quarter (CY Q4 2013) – Yields continued to rise during the quarter as investors looked to exit ahead of the Fed’s tapering of QE purchases. The yield on the 10-year Treasury ended the quarter at 3.0%, up 52 basis points from the beginning of the fiscal year. During the quarter, the treasury yield curve steepened and spreads widened between the 2-year and 30-year to all-time highs. Breakeven inflation ended the quarter at 2.2%, up 25 basis points from the beginning of the fiscal year.

Investment Grade Credit struggled to keep up with both High Yield and Bank Loans during the



quarter. Investor demand for higher yielding sectors, such as High Yield and Bank Loans, continued to drive significant spread tightening.

In the developed markets, real policy rates remained low across the globe. Japan's continuation of "Abenomics" kept Japanese Government Bond yields under 1% and ended the quarter at 0.7%, while the European Central Bank reduced interest rates from 50 basis points to 25 basis points in November. Emerging Market Debt (EMD) returns were mixed for the quarter with hard currency outperforming Local Currency by over 3%. Both hard currency and local currency EMD had a difficult first half of the fiscal year after selling off drastically in the fourth fiscal quarter 2012 "taper tantrum".

The KRS Pension Fixed Income portfolio returned 0.9%, outperforming the benchmark return of 0.2%. The KRS Insurance Fixed Income portfolio returned 0.7%, outperforming the benchmark by 0.5%.

Third Fiscal Quarter (CY Q1 2014) – During the quarter, the Fed decided there was sufficient underlying strength in the broader economy and announced they would reduce the number of asset purchases in February and would continue with further reductions in April. The Fed's comments ultimately pushed the 2-year yield up to 0.44%, a 6 basis point increase, while concerns over the global economic environment weighed on longer maturities. The yield on the 30-year Treasury declined over 40 basis points for the quarter, resulting in a significant flattening of the yield curve.

Investment-grade corporate markets posted a 2.9% gain for the quarter, led by the Utility sector, as issuance remained strong. Within below investment grade credit, CCC-rated issues continued to outperform higher quality high yield, and bank loan inflows remained healthy as investors pushed further out the risk spectrum in search of yield. Ongoing tapering of the Fed's asset purchase program caused Agency MBS to underperform the broad fixed income markets. Turning abroad, hard currency EMD outperformed local currency EMD following heightened currency volatility early in the quarter.

The KRS Pension Fixed Income portfolio returned 2.2%, outperforming the benchmark return of 2.0%. The KRS Insurance Fixed Income portfolio returned 2.0%, in line with the benchmark return of 2.0%.

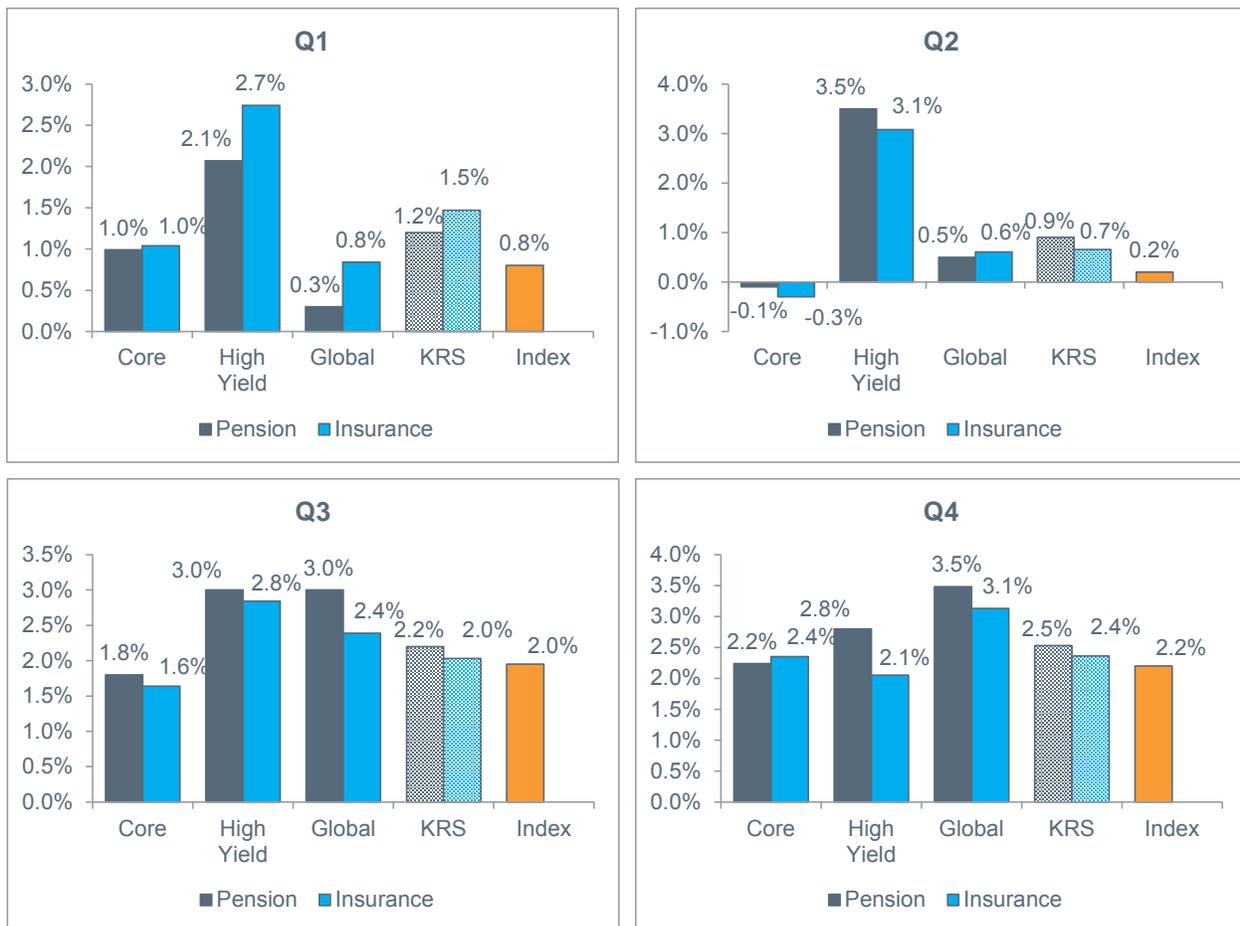
Fourth Fiscal Quarter (CY Q2 2014) – The Barclays U.S. Aggregate Index returned 2.0% for the fourth fiscal quarter pushing the 12 month return to 4.4%. These gains were surprising, as many market participants had anticipated rising rates. Instead, the opposite occurred due to slower than projected economic expansion and a yield spread advantage of the U.S. over many G8 nations.

A historically low volatility environment contributed to a 2.4% return for mortgage-backed securities. Credit led all sectors with a 2.7% return for the quarter. Long credit benefited from a flattening yield curve and outperformed intermediate credit on an absolute and duration- adjusted basis. During the last half of the fiscal year, corporate debt issuance surged in response to high demand. The

appetite for yield continued during the quarter as lower quality investment-grade securities (BBB) returned 3.4%, compared to 1.2% for AAA securities, respectively.

The KRS Pension Fixed Income portfolio returned 2.5%, outperforming the benchmark return of 2.2%. The KRS Insurance Fixed Income portfolio also outperformed the benchmark with a return of 2.4%.

The charts below show the performance per quarter of each sub-composite within the KRS Pension and Insurance Fixed Income Portfolios, the Total Fixed Income Portfolios, and Barclays Universal Index.





Manager Items of Note

There are no manager performance or compliance issues of concern.

Organizational or Team Changes

Shenkman - As of September 2013, David Lerner joined Shenkman as Senior Portfolio Manager, Head of Senior Secured Loans; Frank Whitley as Vice Chairman, shifted his role from portfolio management to risk oversight at the firm.

PIMCO - In January 2014, Mohamed El-Erian, PIMCO's former CEO and Co-CIO, announced his decision to step down from his role and leave the firm in Mid-March of 2014. As of June 2014, PIMCO's founder, Bill Gross, continues to serve as the firm's CIO. Andrew Balls, Dan Ivascyn, Mark Kiesel, Virginie Maisonneuve, Scott Mather and Mihir Worah were made Deputy CIOs. Doug Hodge transitioned to CEO, Jay Jacobs to President and Craig Dawson to Head of Strategic Business Management.

Stone Harbor – As of July 1, 2014, Stuart Sclater-Booth joined the EMD investment team as a Portfolio Manager.

Manager Relative Performance Commentary

Stone Harbor has added value on an absolute basis but underperformed its benchmark (JPM EMB Global Diversified Total Return Index) by 2.6% during the fiscal year and has underperformed since inception by 0.6%. Throughout the summer of 2013, returns on EM debt were driven down by a broad-based selloff and all EM debt sectors experienced significant declines. Primary drivers of underperformance during the last 12 months can be attributed to a country underweight in Argentina within the hard currency sovereign allocation. Other sources of underperformance included local rates and foreign exchange (FX) exposure in Brazil, Indonesia and South Africa. Areas that positively impacted the portfolio were issue selection, particularly an allocation to short duration securities in Venezuela and allocations to hard currency corporate bonds in Argentina and Mexico.

Manulife has added value on an absolute basis but underperformed its benchmark during the fiscal year, returning 6.8% vs. 7.7% for its benchmark (Barclays Multiverse Index). Since inception, the strategy has outperformed its benchmark by 4.0%. Primary drivers of the underperformance during the fiscal year can be attributed to currency management and duration. The use of CAD as a hedge negatively affected relative performance in the 2nd quarter of 2014. Additionally, large underweight exposures to EUR and GBP detracted as each currency appreciated versus the US dollar over the past year. Areas that positively impacted the portfolio were sector and security selection as spread sectors including US high yield, bank loans and convertible bonds were among the best performing segments of the market. The decision to underweight US treasuries and exposure to local currency in New Zealand, Brazil, Mexico and Korea added value.



Fixed Income Structure

There were no new managers added to the KRS fixed income portfolio in the past 12 months and no changes to any of the plans' fixed income target allocations.

The KRS fixed income portfolio is invested across a variety of fixed income strategies including core, high yield, bank loans, and global and EMD as a means of increasing diversification and return potential within the fixed income asset class. As of June 30, 2014, the modified duration of the KRS Pension Fixed Income portfolio was 4.41 years and the average credit quality was BBB+ versus the benchmark's modified duration of 5.06 years and average credit quality of A-. As of June 30, 2014, the modified duration of the KRS Insurance Fixed Income portfolio was 4.40 years and the average credit quality was BBB+ versus the benchmark's modified duration of 5.11 and average credit quality of A-.

The table below highlights each manager's specific investment strategy and its allocation within the KRS fixed income portfolio. This target allocation is consistent across all plans.

Fixed Income Sector Allocations					
Sub-Composite	Core	High Yield	Global	EMD	Total
Core Fixed Income					65.0%
NISA	27.5%				27.5%
PIMCO	22.5%		15.0%		37.5%
High Yield					25.0%
Columbia		7.5%			7.5%
Loomis		7.5%			7.5%
Shenkman		5.0%			5.0%
Waterfall		5.0%			5.0%
Global Fixed Income					10.0%
Manulife			5.0%		5.0%
Stone Harbor				5.0%	5.0%
	50.0%	25.0%	20.0%	5.0%	100.0%



2014/2015 Outlook

Staff and RVK have worked to structure the Fixed Income portfolio to be well diversified across investment styles in preparation for a rising interest rate environment. Staff and RVK will continue to investigate new investment products that may enhance returns while generating attractive cash flows that should contribute to meeting plan distribution obligations.

In addition, Staff and RVK will continue to monitor the contributions of the fixed income managers within the Fixed Income portfolio and to the Total Fund.

The following reports can be found in the **Appendix**:

1. Fiscal Year Economic Commentary by Quarter
2. Fixed Income Asset Allocation Across the Pension and Insurance Plans
3. Manager Profile Pages
4. Glossary



Appendix

Economic Commentary

In the **first quarter of the fiscal year (CY 3Q2013)**, faced with softer U.S. economic growth, fiscal uncertainty, and minimal inflationary pressure, the Federal Reserve surprised many market participants in September with its decision to delay tapering of its quantitative easing (QE) program. The headline unemployment rate declined from 7.6% to 7.3% during the quarter. Job growth was slow but steady, with a significant portion of the improvement due to reduced labor force participation. While real GDP growth remained low, stock prices traded near record highs intra-quarter and bond yields remained near historical lows. Despite the increasing threat of U.S. involvement in Syria, geopolitical events had limited market impact.

During the quarter, the Fed simultaneously quadrupled the size of its balance sheet through QE programs leading to the U.S. federal government having the highest public debt levels relative to GDP since post-WWII. These developments appeared to magnify political polarization as Congress missed its deadline to continue funding discretionary spending, which forced a partial government shutdown on the last day of the quarter.

The **second fiscal quarter (CY 4Q2013)** marked the first negative calendar year for bonds in over fourteen years. While there were continued concerns around future interest rate hikes, the steep yield curve during the quarter suggested the market had already priced in substantial rate increases for 2014. After a 16-day federal shut-down, both sides of Congress came to an interim agreement on appropriations and postponed the debt ceiling until February 7, 2014.

During the quarter, the Fed stated they would likely keep the Federal Funds Rate at 0.00-0.25% even after unemployment had reached their 6.5% threshold.

Federal actions were largely consistent with economic indicators, which continued to show progress throughout the quarter. The unemployment rate dropped to 7.0% on job gains of 203,000 in November and 200,000 in October. While strong jobs numbers were a positive sign for the economy, a persistently low participation rate suggested that the job market was not yet back to full health. Final GDP figures for the first fiscal quarter were revised upwards from an initial reading of 2.8% to 4.1% based on stronger consumer spending and private inventory growth, while inflation remained tepid at 1.7%.

Investors began the **third quarter of the fiscal year (CY 1Q2014)** fixated on the economic impact of severe weather conditions in the U.S. and escalation of the conflict in the Ukraine. The Russian annexation of Crimea contributed to sharp declines in Russian equity and currency markets. Outside of nearby emerging markets, global markets largely withstood the geopolitical turmoil. In the Asia-Pacific region, China's economic growth outlook slowed, while the results of Prime Minister Shinzo Abe's structural reforms in Japan appeared increasingly uncertain.

In the U.S., the Fed released the results of its bank stress tests, which indicated continued



quality improvement in the U.S. banking industry. Janet Yellen assumed office to succeed Ben Bernanke as Fed Chair. In her first press conference as Fed chair, Janet Yellen focused on the persistently below target rate of inflation, distancing the Fed from its previously suggested unemployment rate threshold target of 6.5% as the actual rate held steady at 6.7%. The move gave Yellen more flexibility surrounding the asset purchase program.

During the **fourth quarter of the fiscal year (CY 2Q2014)**, fixed income markets benefited from a narrowing of credit spreads and falling real interest rates. In particular, longer-term treasuries benefitted from the yield curve flattening, which stemmed from lower consensus expectations for economic growth. In June, the minutes from the Fed's meeting revealed it would end its quantitative easing program by October 2014, and that it had no set date to raise rates.

On the international front, the European Central Bank (ECB) announced several policy changes intended to increase liquidity for stressed banks and businesses. The benchmark policy rate was lowered by 10 basis points to 0.15%, bringing the interest rate on excess deposits to -0.10%. The negative rate requires banks to pay the ECB interest on excess reserves, which incentivizes banks to extend credit to the economy. The ECB also announced a long-term loan program targeted toward peripheral Europe's most stressed banks. China reduced the reserve requirement ratios for banks that lend to small- and medium-sized business, as well as agricultural borrowers.

**Kentucky Retirement Systems
Actual Pension Plan Fixed Income Allocations
As of June 30, 2014**

Asset Class	KERS		KHAZ		CERS		CHAZ		SPRS		Total KRS	
	Market Value	%	Market Value	%	Market Value	%	Market Value	%	Market Value	%	Market Value	%
Total Target	\$507,784,815	20.00%	\$106,143,584	19.00%	\$1,229,676,839	19.00%	\$394,192,307	19.00%	\$46,484,191	18.00%	\$2,297,182,450	19.30%
Total Actual	\$517,637,922	20.39%	\$96,494,337	17.26%	\$1,151,700,948	17.80%	\$386,574,410	18.64%	\$46,477,778	17.99%	\$2,198,885,394	18.47%
Core Fixed Income	\$334,847,451	13.19%	\$58,731,777	10.51%	\$697,295,066	10.77%	\$243,901,131	11.76%	\$28,804,910	11.15%	\$1,363,580,335	11.46%
High Yield	\$129,622,107	5.11%	\$26,841,417	4.80%	\$326,579,773	5.05%	\$102,654,156	4.95%	\$12,405,674	4.80%	\$598,103,125	5.03%
Global Bonds	\$53,168,364	2.09%	\$10,921,143	1.95%	\$127,826,109	1.98%	\$40,019,124	1.93%	\$5,267,194	2.04%	\$237,201,933	1.99%

**Kentucky Retirement Systems
Actual Insurance Plan Fixed Income Allocations
As of June 30, 2014**

Asset Class	KERS		KHAZ		CERS		CHAZ		SPRS		Total KRS	
	Market Value	%	Market Value	%	Market Value	%	Market Value	%	Market Value	%	Market Value	%
Total Target	\$126,482,973	20.00%	\$86,256,563	20.00%	\$373,004,259	20.00%	\$205,017,092	20.00%	\$32,724,326	20.00%	\$823,485,213	20.00%
Total Actual	\$126,154,010	19.95%	\$87,577,934	20.30%	\$374,591,293	20.08%	\$205,365,806	20.04%	\$33,785,399	20.65%	\$827,474,441	20.10%
Core Fixed Income	\$80,551,875	12.74%	\$57,461,505	13.32%	\$241,003,856	12.92%	\$132,084,739	12.89%	\$21,646,686	13.23%	\$532,748,661	12.94%
High Yield	\$30,191,562	4.77%	\$20,624,192	4.78%	\$90,417,782	4.85%	\$49,643,167	4.84%	\$7,744,758	4.73%	\$198,621,461	4.82%
Global Bonds	\$15,410,572	2.44%	\$9,492,237	2.20%	\$43,169,654	2.31%	\$23,637,900	2.31%	\$4,393,955	2.69%	\$96,104,319	2.33%

Allocations shown may not sum exactly due to rounding.